# ESSEX AVE **USGS MAP**

BLOCK	LOT	OWNER	BLOCK	LOT	OWNER
43	1	CONRAIL CORP & NORFOLK SOUTHERN CORP PO BOX 40036 ROANOKE, VA 24022-0036	70	87	VITAL MNGMT & CONSULTING, LLC 26 OLIVER ST SUITE 100
43	2	CONRAIL CORP & NORFOLK SOUTHERN CORP PO BOX 40036 ROANOKE, VA 24022-0036	70	88	METUCHEN, NJ 08840  VITAL MNGMT & CONSULTING, LLC 26 OLIVER ST SUITE 100
13	3	CONRAIL CORP & NORFOLK SOUTHERN CORP PO BOX 40036 ROANOKE, VA 24022-0036	71	37.01	METUCHEN, NJ 08840 METUCHEN III LLC 8101 GLENBROOK RD
69 69	97	KRUSE, DOROTHY & DECKMAN, C & RONA, R 15 OLIVER ST METUCHEN, NJ 08840  KRUSE, DOROTHY & DECKMAN, C & RONA, R	71	37.02	SUITE B BETHESDA, MD 20814  METUCHEN I LLC 8101 GLENBROOK RD
69	99	15 OLIVER ST METUCHEN, NJ 08840 MANDELL, MICHAEL	72	33	SUITE B BETHESDA, MD 20814 KARAN KARISHMA, LLC
69	100	14 EAST FRANCESA CT FARMINGDALE, NJ 07727 MANDELL, MICHAEL			M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
69	101	14 EAST FRANCESA CT FARMINGDALE, NJ 07727 VITAL MIGHT & CONSULTING, LLC	72	34	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
69	102	26 OLIVER ST SUITE 100 METUCHEN, NJ 08840 VITAL MNGMT & CONSULTING, LLC	72	35	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
99	102	26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	72	36	LASEML LLC 400 NEW DURHAM RD METUCHEN, NJ 08840
9	103	VITAL MNGMT & CONSULTING, LLC 26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	72	37	LASEML LLC 400 NEW DURHAM RD METUCHEN, NJ 08840
69	104	VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST SUITE 100	72	38	LASEML LLC 400 NEW DURHAM RD METUCHEN, NJ 08840
69	105	METUCHEN, NJ 08840  VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST SUITE 100	72	39	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
69	125.6	METUCHEN, NJ 08840 50 HAMPTON STREET REALTY LLC 50 HAMPTON STREET	72	40	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28
9	125.7	METUCHEN, NJ 08840 BOROUGH OF METUCHEN 500 MAIN ST.	72	41	BRIDGEWATER, NJ 08807  KARAN KARISHMA, LLC  M. PATEL  157 UNION AVE, ROUTE 28
0	63	METUCHEN, NJ 08840  15 ADAMS STREET LLC 1540 ROUTE 138 SUITE 301	72	42	BRIDGEWATER, NJ 08807  KARAN KARISHMA, LLC
<b>'</b> 0	64	WALL, NJ 07719  15 ADAMS STREET LLC 1540 ROUTE 138			M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
0	65	SUITE 301 WALL, NJ 07719 LENIHAN, HELEN A.	72	43	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
<b>7</b> 0	66	23 ADAMS ST. METUCHEN, NJ 08840 LENIHAN, HELEN A. 23 ADAMS ST.	72	44	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807
<b>7</b> 0	67	METUCHEN, NJ 08840 LENIHAN, HELEN A. 23 ADAMS ST.	72	45	KARAN KARISHMA, LLC M. PATEL 157 UNION AVE, ROUTE 28
<b>7</b> 0	68	METUCHEN, NJ 08840 VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST	72	46	BRIDGEWATER, NJ 08807 KARAN KARISHMA, LLC M. PATEL
0	69	SUITE 100 METUCHEN, NJ 08840 VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST	72	47	157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807 KARAN KARISHMA, LLC M. PATEL
<b>7</b> 0	70	SUITE 100 METUCHEN, NJ 08840 VITAL MANAGEMENT & CONSULTING, LLC	72	48	157 UNION AVE, ROUTE 28 BRIDGEWATER, NJ 08807 LEASE, STANLEY E & JUNE
		26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	72	49	28 FRANKLYN PL. METUCHEN, NJ 08840 LEASE, STANLEY E & JUNE
0	71	VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	72	50	28 FRANKLYN PL. METUCHEN, NJ 08840 LEASE, STANLEY E & JUNE 28 FRANKLYN PL.
70	80	VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	72	51	METUCHEN, NJ 08840  LEASE, STANLEY E & JUNE 28 FRANKLYN PL.
0	81	VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST SUITE 100	72	52	METUCHEN, NJ 08840 LEASE, STANLEY E & JUNE 28 FRANKLYN PL.
0	82	METUCHEN, NJ 08840  VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST	82	1.011	METUCHEN, NJ 08840  395 PLEASANT VALLEY LP 95 CENTRAL AVE METUCHEN NJ 08840
0	83	SUITE 100 METUCHEN, NJ 08840  VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST	82.01	10	METUCHEN, NJ 08840  MARTYNOVICH, ALEXANDER & NATA 21 CENTRAL SQUARE PARK METUCHEN, NJ 08840
'O	84	SUITE 100 METUCHEN, NJ 08840 VITAL MANAGEMENT & CONSULTING, LLC	82.01	11	CHADIVE, SRIKANTH & SALLA, PRAV 22 CENTRAL SQUARE METUCHEN, NJ 08840
		26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	82.01	12	SOMASUNDARAM, C & CHEZIAN, S 23 CENTRAL SQUARE PARK METUCHEN, NJ 08840
0	85	VITAL MANAGEMENT & CONSULTING, LLC 26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	82.01	13	DIZON, GENEVIEVE 24 CENTRAL SQUARE PARK METUCHEN, NJ 08840
0	86	VITAL MNGMT & CONSULTING, LLC 26 OLIVER ST SUITE 100 METUCHEN, NJ 08840	83	24.01	DISTRICT AT METUCHEN II, LLC 3663 RTE 9 SUITE 202 OLD BRIDGE, NJ 08857
		ME I OOI IEN, NO 00040	83.1	33	PSEG SERVICES CORP CORP PROP DEPT.

PARKING AUTHORITY 500 MAIN STREET METUCHEN, NJ 08840 PO BOX 368 EMAUS, PA 18049 MIDDLESEX COUNTY PLANNING BOARD MIDDLESEX COUNTY ADMINISTRATION BUILDING JOHN F. KENNEDY SQUARE 75 BAYARD STREET, 5<sup>TH</sup> FLOOR NEW BRUNSWICK, NJ 08901 TEXAS EASTERN TRANSMISSION 501 COOLIDGE STREET SOUTH PLAINFIELD, NJ 07080 UNION, NJ 07083 CABLEVISION OF RARITAN VALLEY 275 CENTENNIAL AVENUE CN 6805 PISCATAWAY, NJ 08855 MARGUERITE PRENDERVILLE CONSTRUCTION DEPARTMENT FREEHOLD SOIL CONSERVATION DISTRICT 4000 KOZLOSKI ROAD PO BOX 5033 FREEHOLD, NJ 07728-5033

# PRELIMINARY & FINAL MAJOR SITE PLAN

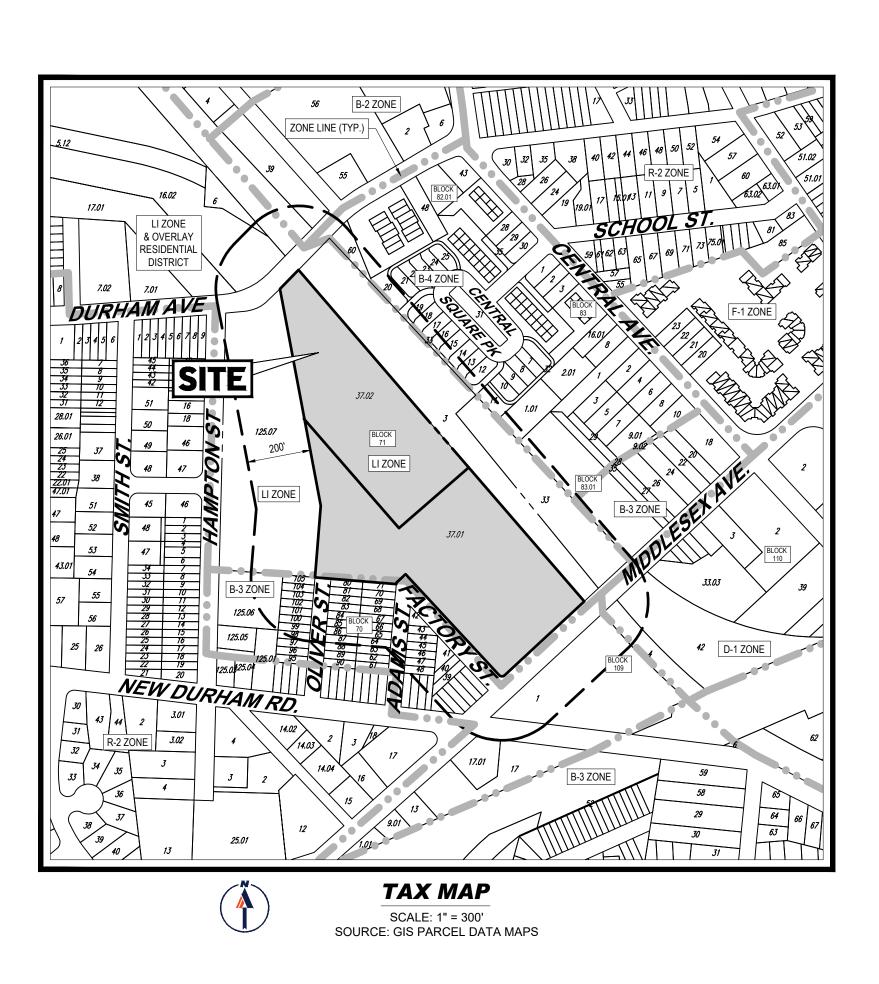


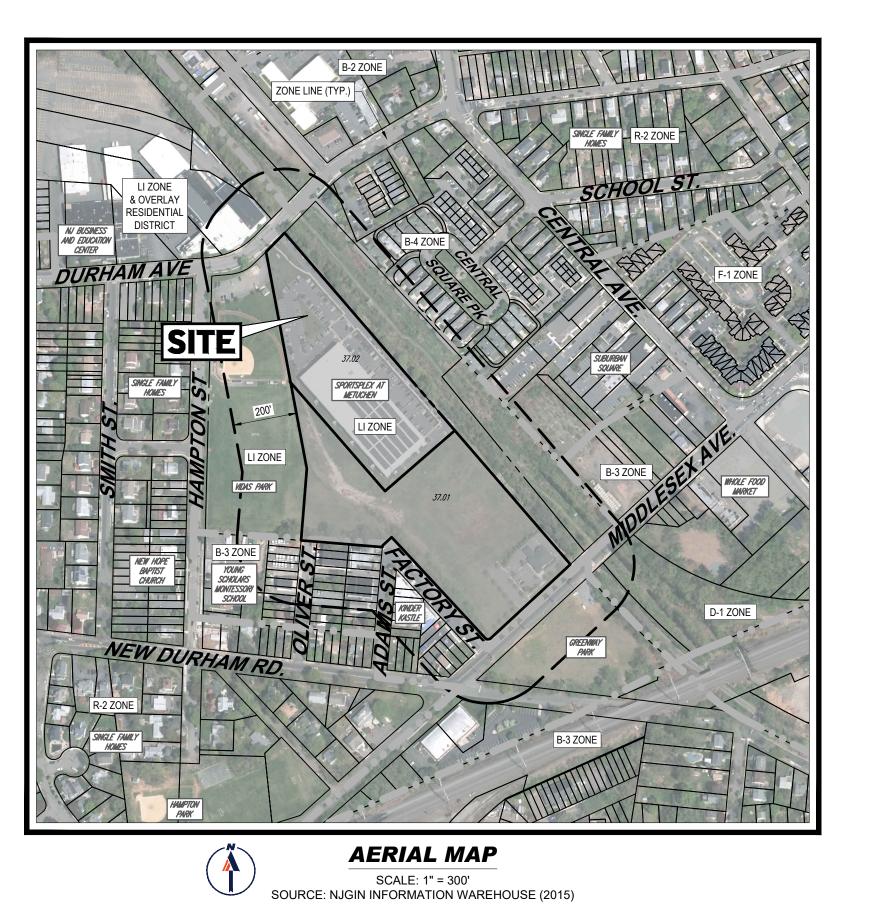
## **PROPOSED**

# **DAYCARE**

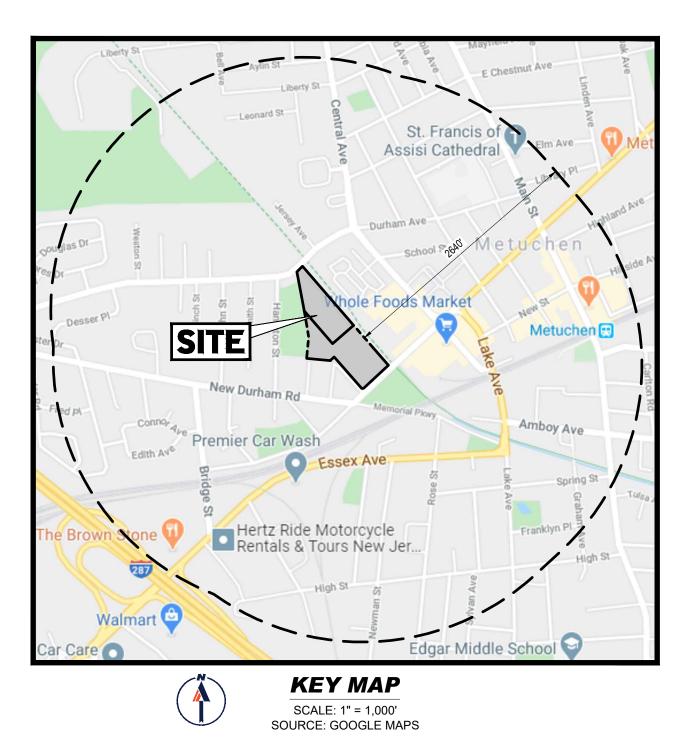
**215 DURHAM AVENUE** BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY

OAKITE SITE REDEVELOPMENT; TAX MAP SHEET #17





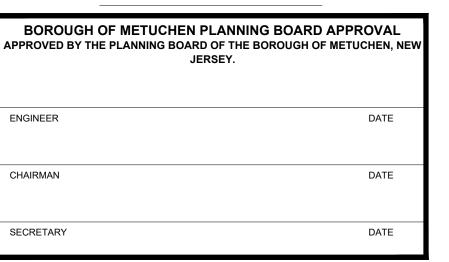
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#### **DRAWING SHEET INDEX**

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DRAINAGE AND UTILITIES PLAN	C-501
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SOIL EROSION CONTROL NOTES & DETAILS	C-602
LANDSCAPE PLAN	C-701
LANDSCAPE NOTES & DETAILS	C-702
LIGHTING PLAN	C-703
DETAIL SHEET	C-901 TO C-904
FIRE TRUCK TURNING EXHIBIT	1 OF 1
ALTA/ACSM LAND TITLE SURVEY (BY CONTROL POINT ASSOCIATES, INC.)	1 OF 2

#### APPROVAL BLOCK



**OWNER & APPLICANT: THOMAS ALBERT** METUCHEN III, LLC C/O THE MAVEN GROUP 8101 GLENBROOK ROAD FLOOR 1, SUITE B BETHESDA, MARYLAND 20814

**REVISIONS** 



**ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVA** 

**CHECKED BY** 

PRELIMINARY & FINAL MAJOR SITE PLAN



215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN MIDDLESEX COUNTY, NEW JERSEY** OAKITE SITE REDEVELOPMENT;

TAX MAP SHEET #17

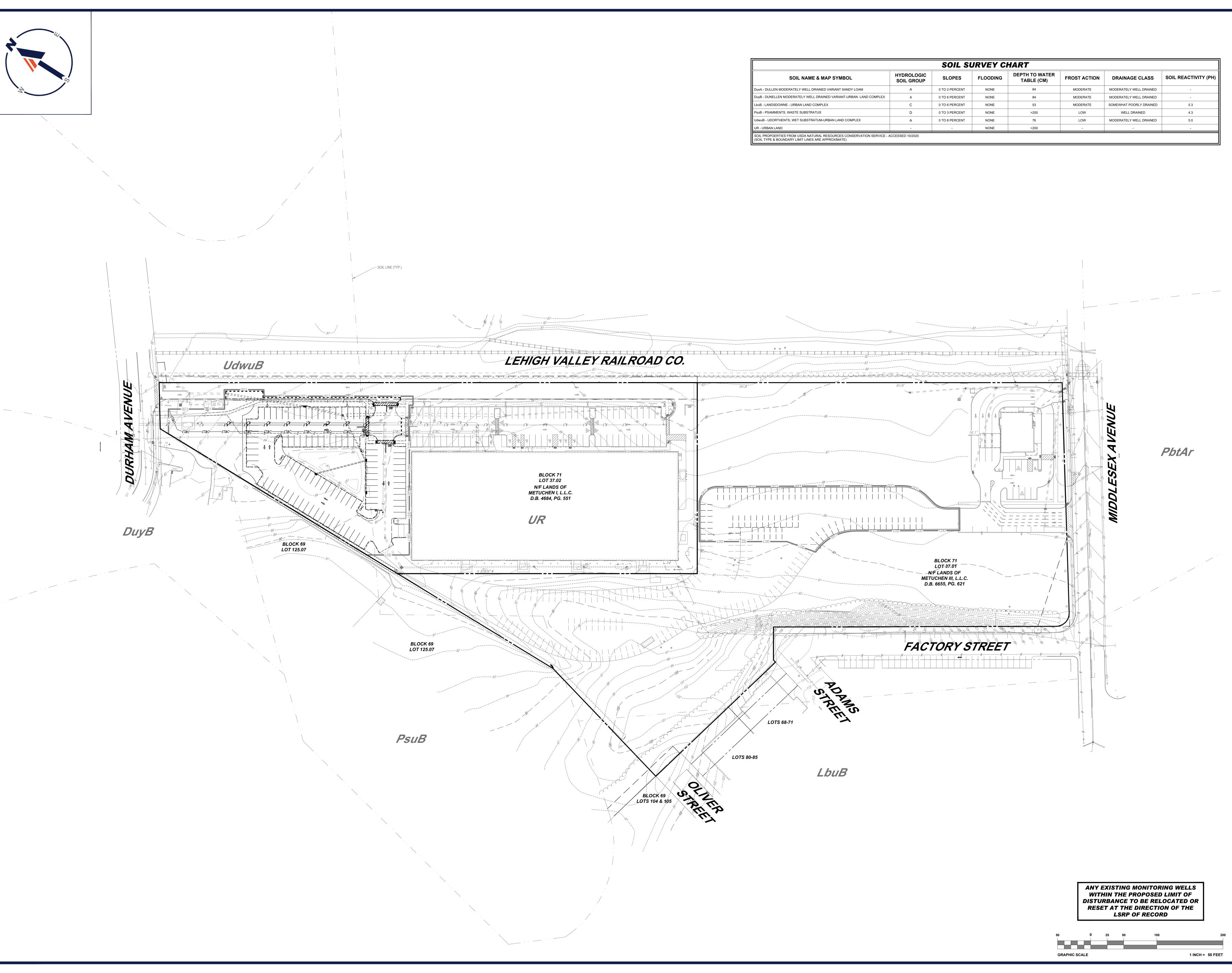
10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054

Phone: (856) 930-4000 Fax: (856) 930-4001 www.BohlerEngineering.com NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH000

**PROFESSIONAL ENGINEER** NEW JERSEY LICENSE No. 46184 PENNSYLVANIA LICENSE No. 73909

COVER SHEET

C-101





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PROJECT No.: JM160715
DRAWN BY: MB
CHECKED BY: ML/AT
DATE: 11/08/2021
CAD I.D.: JM160715-SPP-2A

PRELIMINARY &
FINAL MAJOR
SITE PLAN

MAVEN GROUP experts in real estate since 1991

PROPOSED

DAYCARE

215 DURHAM AVENUE
BLOCK 71; LOTS 37.01 & 37.02
BOROUGH OF METUCHEN
MIDDLESEX COUNTY, NEW JERSEY
OAKITE SITE

REDEVELOPMENT; TAX MAP SHEET #17

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BOHLER ENGINEERING NJ, LLC

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A. TAMOUS

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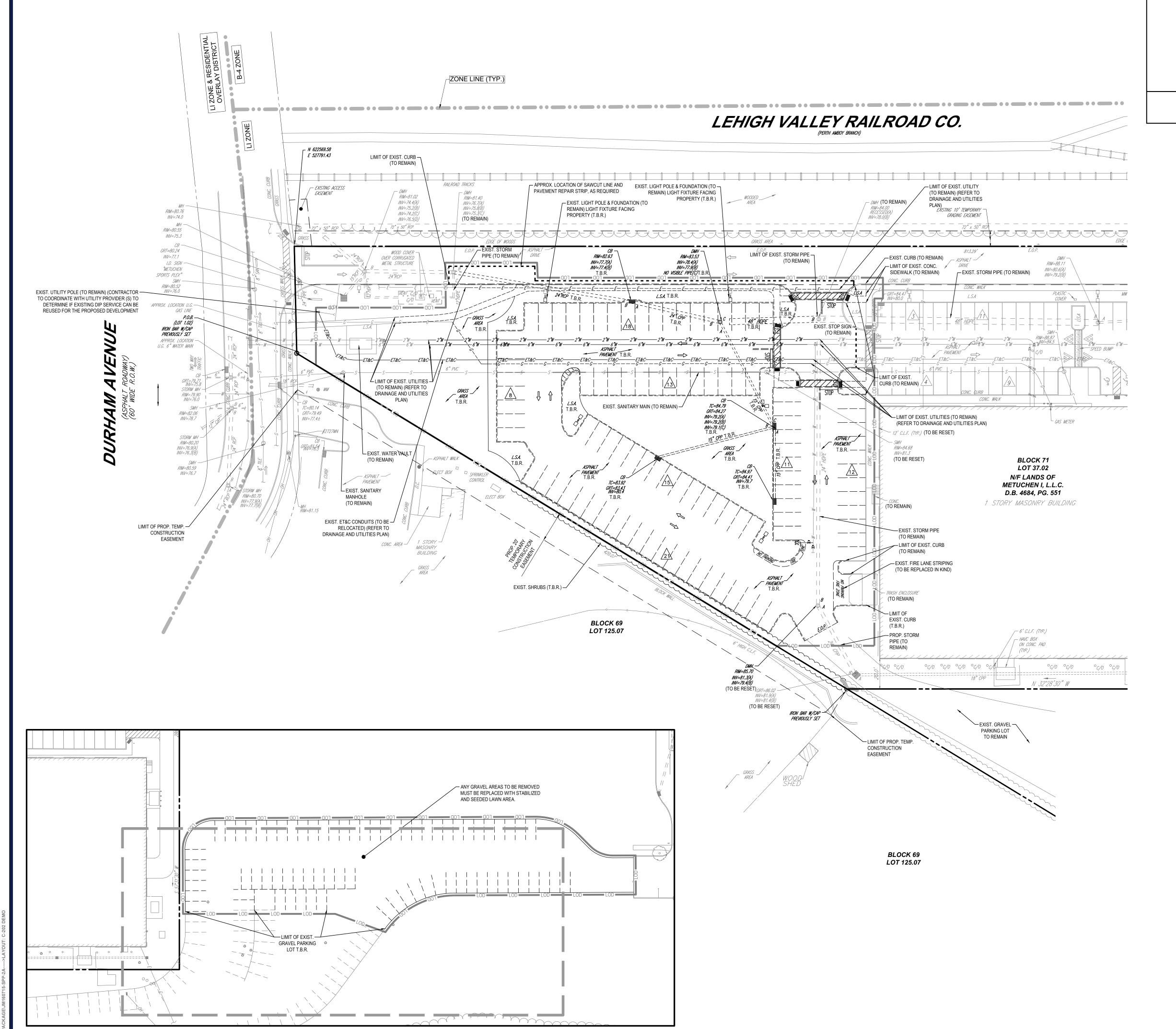
NEW JERSEY LICENSE No. 46184
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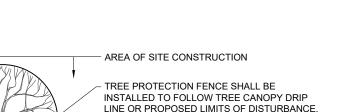
IEET TITLE.

ENVIRONMENTAL ANALYSIS MAP

C-201







- AREA WITHIN TREE PROTECTION

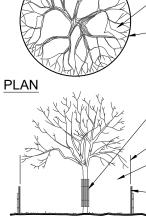
**70NE TO REMAIN UNDISTURBED** 

DURING CONSTRUCTION.

AT 8' MAXIMUM CENTER TO

GRADE).

CENTER (MINIMUM 2' BELOW



4' HIGH WOOD & WIRE SNOW FENCE W/WOOD STAKES AT A MAXIMUM OF 8' ON CENTER. AS AN OPTION, ORANGE/FLUORESCENT HIGH-DENSITY "VISI-FENCE" OR APPROVED EQUAL CAN BE USED. - WOOD & WIRE SNOW FENCE USED AS TREE GUARD TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT. TREE DRIP LINE/TREE PROTECTION ZONE

- 6' WOOD OR STEEL FENCE POSTS **ELEVATION** 

> TREE PROTECTION DURING SITE CONSTRUCTION DETAIL

> > NOT TO SCALE (0039909 - 4/2017)

	EGENE	
EXISTING	D	EMOLITION
	BUILDING	
	CANOPY	
	PROPERTY LINE	
	ADJACENT PROPERTY LINE	
	ROW LINE	
	EASEMENT LINE	
LIP	SAWCUT LINE / MIT OF DISTURBANC	<b></b>
	CURB	
	FLUSH CURB	
	CURB WALL	
	RETAINING WALL	
₹ P	AVEMENT MARKING	<b>←</b>
Ë A	CCESSIBLE SYMBO	<b>&amp;</b>
	PARKING COUNT	19
	AREA LIGHT	
-0-	UTILITY POLE	-
	LIGHT POLE	
~ S	IGN / BOLLARD SIGN	1 -
	DOOR LOCATION	EN/EXT
•	BOLLARD	0
	FENCE	
	DECORATIVE FENCE	
	HANDRAIL	
	GUIDE RAIL	
Ø ⑤	MANHOLE RAINAGE / SANITAR	y ® \$
	MANHOLE	
	DRAINAGE INLET	
WV GV ⋈ ⋈	WATER / GAS VALVE	нн
Ä	FIRE HYDRANT	ä
	CLEANOUT	o C/O

#### **DEMOLITION NOTES**

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. 2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.

(Rev. 2/2021)

WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS. 4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN. A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES

ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS. B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK ALL MEANS METHODS. SEQUENCING TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, EDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.

5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE, THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.

6. ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER. COMPLYING WITH ALL OSHA REQUIREMENTS TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL LINALITHORIZED PERSONS AT ANY TIME. TO OR NEAR THE DEMOLITION AREA. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE SAFETY OF THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT. ANY SUCH CONCERNS MUST BE CONVEYED TO THE ENGINEER OF RECORD AND BOHLER, IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE ENGINEER OF RECORD AND BY BOHLER. IN WRITING, ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES ORDINANCES AND CODES

9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED. REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS. RULES, STATUTES, LAWS, ORDINANCES AND CODES. 10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST: A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND ALL PUBLIC

AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK. B. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK C. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION.

E. LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES. F. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY

G. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME THESE ARE NOT THE ENGINEER OF RECORD'S RESPONSIBILITY. IN THE EVENT OF ABANDONMENT. THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS. H. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE IMPACT ON, OF, AND TO THE AFFECTED PARTIES WORK REQUIRED TO BE PERFORMED "OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER . IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL. THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER AND ENGINEER OF RECORD AND BOHLER, THE DISCOVERY OF SUCH MATERIALS TO PURSUE PROPER AND

COMPLIANT REMOVAL OF SAME 11. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, LINESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER. 12. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE,

WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION 13. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES, BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT ALL NEW IMPROVEMENTS AND MUST BE PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT SUCH REPORTS AND RESULTS TO THE ENGINEER OF RECORD AND THE OWNER 14. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY

DEMOLITION ACTIVITIES, THE CONTRACTOR MUST ENSURE AND OVERSEE THE INSTALLATION OF ALL OF THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE LIKE. 15. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS, THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR. AFTER THE DEMOLITION IS COMPLETE, THE ONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR

"PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST. 16. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED, INCLUDING BUT NOT LIMITED TO, THE PUBLIC RIGHT-OF-WAY. 17. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE

CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTOR'S SOLE COST 18. THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS, IF ENCOUNTERED, IN ACCORDANCE WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, PRIOR TO CONTINUING CONSTRUCTION IN THE AREA AROUND THE TANK WHICH EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST.

**ANY EXISTING MONITORING WELLS** 

WITHIN THE PROPOSED LIMIT OF DISTURBANCE TO BE RELOCATED OR

RESET AT THE DIRECTION OF THE

LSRP OF RECORD

PRIOR TO CONSTRUCTION,

**CONTRACTOR TO COORDINATE WITH** 

**UTILITY PROVIDERS TO DETERMINE** 

**METHODS OF RELOCATING EXISTING** 

UTILITIES AND TO CONFIRM THE

LIMITS OF UTILITIES THAT ARE TO BE

REMOVED AND/OR RELOCATED.

**CONTRACTOR MUST ALSO VERIFY THE** 

SIZE, LOCATION, AND DEPTH OF ALL UTILITIES IN FIELD PRIOR TO

**CONSTRUCTION TO DETERMINE IF** 

ANY CONFLICTS ARE PRESENT WITH

THE PROPOSED RELOCATIONS.

ALL EXISTING ON-SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE

ARE TO BE REMOVED UNLESS

OTHERWISE NOTED.

ALL EXISTING FEATURES OUTSIDE LIMIT OF DISTURBANCE ARE TO

REMAIN UNLESS OTHERWISE NOTED.

T.B.R. = FEATURE TO BE REMOVED

ALL EXISTING FEATURES IN R.O.W. ARE

TO REMAIN UNLESS OTHERWISE NOTED

THIS PLAN TO BE UTILIZED FOR

**DEMOLITION PURPOSES ONLY** 

**GRAPHIC SCALE** 

1 INCH = 30 FEET

**ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVAI** EVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRU DOCUMENT UNLESS INDICATED OTHERWISE.

> DRAWN BY: **CHECKED BY** JM160715-SPP-2A PRELIMINARY &

> > FINAL MAJOR

SITE PLAN

Call before you dig

YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.

**REVISIONS** 

COMMENT

REV. PER BOROUGH

REV. PER CLIENT

11/19/2021 COMMENTS

2 |12/23/2021 | COMMENTS

MAVEN GROUP

**PROPOSED DAYCARE** 215 DURHAM AVENUE

BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY OAKITE SITE REDEVELOPMENT; TAX MAP SHEET #17

**BOHLER** 10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001

www.BohlerEngineering.com NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH000 A. TAMOUS

> PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184

PENNSYLVANIA LICENSE No. 73909

SHEET TITLE:

**DEMOLITION** PLAN

C-202

**REVISION 2 - 12/23/2021** 

AND SEEDED LAWN AREA.

**EXISTING WATER MAIN SIZES DEPICTED PER FINAL PROPOSED** 3/4/10, PREPARED BY BOHLER

PRIOR TO CONSTRUCTION, **CONTRACTOR MUST REVIEW** APTIM.

ANY GRAVEL AREAS TO BE REMOVED **MUST BE REPLACED WITH STABILIZED** 

**NOTE: A VISIBLE CONTAMINATION BOUNDARY MARKER (DEMARCATION** BARRIER) MUST BE PROVIDED **BETWEEN PROPOSED IMPROVEMENTS** AND THE EXISTING CAPPED MATERIAL.

**MAJOR SITE PLAN FOR METUCHEN** LLC, DATED 7/18/08, LAST REVISED ENGINEERING.

REFER TO SOIL EROSION AND SEDIMENT CONTROL PLAN FOR SOIL EROSION NOTES AND MEASURES.

REFER TO SITE LAYOUT PLAN FOR ADDITIONAL NOTES. REFERENCES AND SPECIFICATIONS.

REMEDIATION REQUIREMENTS FOR ENVIRONMENTAL MATERIAL **ENCOUNTERED AND ENVIRONMENTAL** CONTROLS PRESENT ON-SITE WITH



ZONING TABLE - SPORTSPLEX & DAYCARE  ZONE: OAKITE SITE REDEVELOPMENT PLAN AREA (FORMERLY LI - LIGHT INDUSTRIAL ZONE)  USE: EXISTING SPORTSPLEX AND PROPOSED DAYCARE  BLOCK: 71 LOT: 37.02 (PARCEL E IN REDEVELOPMENT PLAN)									
BULK REQUIREMENTS (PARCEL E)									
ITEM	CODE	REQUIRED	EXISTING (LOT 37.02)	PROPOSED (LOT 37.02)					
MIN. LOT AREA		210,000 SF	195,100 SF (4.48 AC.)	195,100 SF (4.48 AC.) (V)					
MIN. YARD SETBACK FROM THE NORTH-SOUTH SEGMENT OF THE MID-BLOCK CONNECTOR ROADWAY		15'	N/A*	N/A*					
MIN. YARD SETBACK FROM VIDAS PARK		25' <sup>(3)</sup>	28.3'	25.6' (22.4' TO CANOPY)					
MIN. YARD SETBACK FROM DURHAM AVENUE	AMENDED OAKITE SITE	150' <sup>(3)</sup>	379.1'	164.8' (162.5' TO CANOPY)					
MAX. BUILDING HEIGHT	REDEVELOPMENT - PLAN	TWO (2) STORIES OR 30' (FOR NEW CONSTRUCTION), 45' (EXISTING SPORTSPLEX)	45'	ONE (1) STORY 26'4" (NEW CONSTRUCTION), 45' (EXISTING SPORTSPLEX)					
MAX. BUILDING COVERAGE		40%	33.9% (66,074 SF)	40.5% (78,944 SF) (V)					
MAX. IMPERVIOUS COVERAGE		90%	81.2% (158,431 SF)	83.7% (163,380 SF)					
			KEY =	VARIANCE REQUIRED (V)					

AGREEMENT WITH LOT 37 01

#### **ZONING NOTES**

§ 110-153.D. PARKING SPACE DIMENSIONS. STANDARD PARKING SPACES SHALL MEASURE NINE FEET WIDE BY 18 FEET LONG. HANDICAPPED PARKING SPACES SHALL MEASURE 12 FEET WIDE BY 18 FEET LONG. 12' ADA STALL WIDTH PROVIDED WITH 9' WIDE SPACE AND STRIPED UNLOADING AREA.

INDOOR RECREATIONAL SPORTS FACILITIES:  1 SPACE / 1,000 SF GFA  66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES  NURSERY SCHOOLS & DAYCARE CENTERS:  1 SPACE / 3 CHILDREN	ITEM	PERMITTED	PROPOSED
MIN. COMPACT STALL SIZE  8' X 16'  8' X 16'  MIN. PARKING SETBACK FROM ANY OTHER PARCEL LINE (EXCLUDING CONNECTOR DRIVEWAY TO REAR OF SPORTSPLEX)  5'  13.3' (3) (V)  MIN. NUMBER OF STALLS  107  110 PAVED STALLS ON LOT 37.0'  INDOOR RECREATIONAL SPORTS FACILITIES: 1 SPACE / 1,000 SF GFA 66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES  NURSERY SCHOOLS & DAYCARE CENTERS: 1 SPACE / 3 CHILDREN	MIN. STANDARD STALL SIZE	9' X 18'	9' X 18'
MIN. PARKING SETBACK FROM ANY OTHER PARCEL LINE (EXCLUDING CONNECTOR DRIVEWAY TO REAR OF SPORTSPLEX)  MIN. NUMBER OF STALLS  107  110 PAVED STALLS ON LOT 37.0  INDOOR RECREATIONAL SPORTS FACILITIES: 1 SPACE / 1,000 SF GFA 66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES  NURSERY SCHOOLS & DAYCARE CENTERS: 1 SPACE / 3 CHILDREN	MAX. NUMBER OF COMPACT STALLS	15% OF TOTAL	< 15% (14 SPACES)
(EXCLUDING CONNECTOR DRIVEWAY TO REAR OF SPORTSPLEX)  MIN. NUMBER OF STALLS  107  110 PAVED STALLS ON LOT 37.0  INDOOR RECREATIONAL SPORTS FACILITIES: 1 SPACE / 1,000 SF GFA 66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES  NURSERY SCHOOLS & DAYCARE CENTERS: 1 SPACE / 3 CHILDREN	MIN. COMPACT STALL SIZE	8' X 16'	8' X 16'
INDOOR RECREATIONAL SPORTS FACILITIES:  1 SPACE / 1,000 SF GFA  66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES  NURSERY SCHOOLS & DAYCARE CENTERS:  1 SPACE / 3 CHILDREN	(EXCLUDING CONNECTOR DRIVEWAY TO REAR OF	5'	13.3' <sup>(3)</sup> (V)
1 SPACE / 1,000 SF GFA 66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES  NURSERY SCHOOLS & DAYCARE CENTERS: 1 SPACE / 3 CHILDREN	MIN. NUMBER OF STALLS	107	110 PAVED STALLS ON LOT 37.02 <sup>(2)</sup>
120 CHILDREN (MAX.) X 1 SPACE / 3 CHILDREN = 40 SPACES  (DAYCARE) ADA PARKING SPACES (25-50 TOTAL SPACES) = 2 SPACES REQUIRED. 2 PROPOSED. (SPORTSPLEX) ADA PARKING SPACES (201-300 TOTAL SPACES) = 7 SPACES REQUIRED. 7 EXISTING.	1 SPACE / 1,000 SF GFA 66,074 SF X 1 SPACE / 1,000 SF = 66.1 = 67 SPACES		

TEMPORARY GRAVEL PARKING AREA ON LOT 37.01 ENCROACHES INTO LOT 37.02, CREATING A 0' PARKING SETBACK (V)

#### WALL-MOUNTED SIGN REQUIREMENTS CODE PERMITTED 48 SF (SOUTH) 61 SF (NORTH & EAST) MAX. SIZE OF SIGNBOARD 24 SF 4'-10" (SOUTH) MAX. HEIGHT OF SIGNBOARD 5'-3" (NORTH & EAST) 3'-6" (NORTH & EAST) (V MAX. WIDTH OF SIGNBOARD MAX. HEIGHT OF LETTERING

§ 110-185(F)

1 SIGN

3 SIGNS (V)

KEY = VARIANCE REQUIRED (V

MAX. NUMBER OF SIGNS

## REFERENCES

AND CONTACTS REFERENCES ♦ ALTA/ACSM LAND TITLE SURVEY: CONTROL POINT ASSOCIATES INC 30 INDEPENDENCE BLVD., SUITE 100 WARREN, NJ 07059 DATED: 01/19/2011 FILE NO: C02274.04 ♦ ARCHITECTURAL PLAN: ADA ARCHITECTS INC 17710 DETROIT AVENUE LAKEWOOD, OHIO 44107 DATED: 09/24/2019 LAST REV.: 04/01/2021 JOB NO: 19001 **♦ GEOTECHNICAL REPORT** MELICK-TULLY AND ASSOCIATES, P.C. 117 CANAL ROAD SOUTH BOUND BROOK, NJ 08880 PROJECT NO: 8717-001\*1D ◆AMENDED OAKITE SITE REDEVELOPMENT PLAN 217 NASSAU STREET PRINCETON, NJ 08542 DATED: 08/18/2021 LAST REV: 09/13/2021 ♦PRELIMINARY AND FINAL SITE AND SUBDIVISION PLAN DYNAMIC ENGINEERING CONSULTANTS, P.C. 45 MAIN STREET, STE 110 CHESTER, NJ 07930 DATED: 04/06/2020 LAST REV: 07/27/2020

> THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCE! OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

#### **GENERAL NOTES**

(HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE ENGINEER OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN: THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE ENGINEER OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING

(Rev. 2/2021)

DESCRIBED ABOVE

- 4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING ALTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS. ATTACHMENTS AND ADDENDA TO SAME.
- 6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS
- THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY ENGINEER OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING ENGINEER OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) ENGINEER OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR
- PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS. 10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. 11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS
- SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS. PRIOR TO PROCEEDING WITH ANY FURTHER WORK IF A GEOTECHNICAL REPORT WAS NOT CREATED. THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT. 12. ENGINEER OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST 14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL
- APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOIVED WITH THE PROJECT 15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR. 16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
- 17. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC, AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES, THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN

WRITING. THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.

JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE ENGINEER OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY 19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE ENGINEER OF RECORD AND BOHLER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND

HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT

20. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR

18. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY

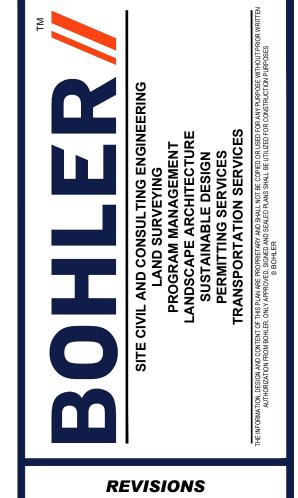
- CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS AND CHRRENT CODES RULES STATUTES AND THE LIKE IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT ENGINEER AND BOHLER SUFFER AND ANY AND ALL COSTS THAT ENGINEER AND BOHLER
- ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES, ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER. AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED. WHICHEVER DATE IS LATER, IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT. INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND
- ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY ENGINEER. IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION. SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND
- METHODS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION 23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION. THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS
- 4. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS. AS CONDITIONS PERMIT, ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT
- REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT, BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION 25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN ENGINEER'S SCOPE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS. ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND,
- INDEMNIFY, PROTECT, AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME. 6 THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND FLEMENTS IN ACCORDANCE WITH FEDERAL STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR

DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER

- PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO 28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE
- OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME. 29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. ENGINEER OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
- 30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD ENGINEER OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LÓCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING

AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE ENGINEER OF RECORD AND BOHLER. THE USE OF THE WORDS 'CERTIEY'

OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE ENGINEER OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED,



COMMENT REV DATE REV. PER CLIENT 11/19/2021 COMMENTS REV. PER BOROUGH 2 |12/23/2021 | COMMENTS



**ISSUED FOR MUNICIPAL 8** 

JM160715-SPP-2

**AGENCY REVIEW & APPROVA** 

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DRAWN BY: CHECKED BY CAD I.D.:

> PRELIMINARY & FINAL MAJOR SITE PLAN

MAVEN GROUP

**PROPOSED** 

DAYCARE 215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY OAKITE SITE REDEVELOPMENT;

**TAX MAP SHEET #17** 0000 MIDLANTIC DRIVE, SUITE 410W

**MOUNT LAUREL, NJ 08054** Phone: (856) 930-4000 Fax: (856) 930-4001 www.BohlerEngineering.com JJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH00

A. TAMOUS

PROFESSIONAL ENGINEER

NEW JERSEY LICENSE No. 46184 PENNSYLVANIA LICENSE No. 73909

1 INCH = 50 FEET

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

REFER TO SITE LAYOUT PLAN FOR ADDITIONAL NOTES, REFERENCES AND

SUBDIVISION, FOR REFERENCE ONLY. (NOT PART OF THIS APPLICATION)

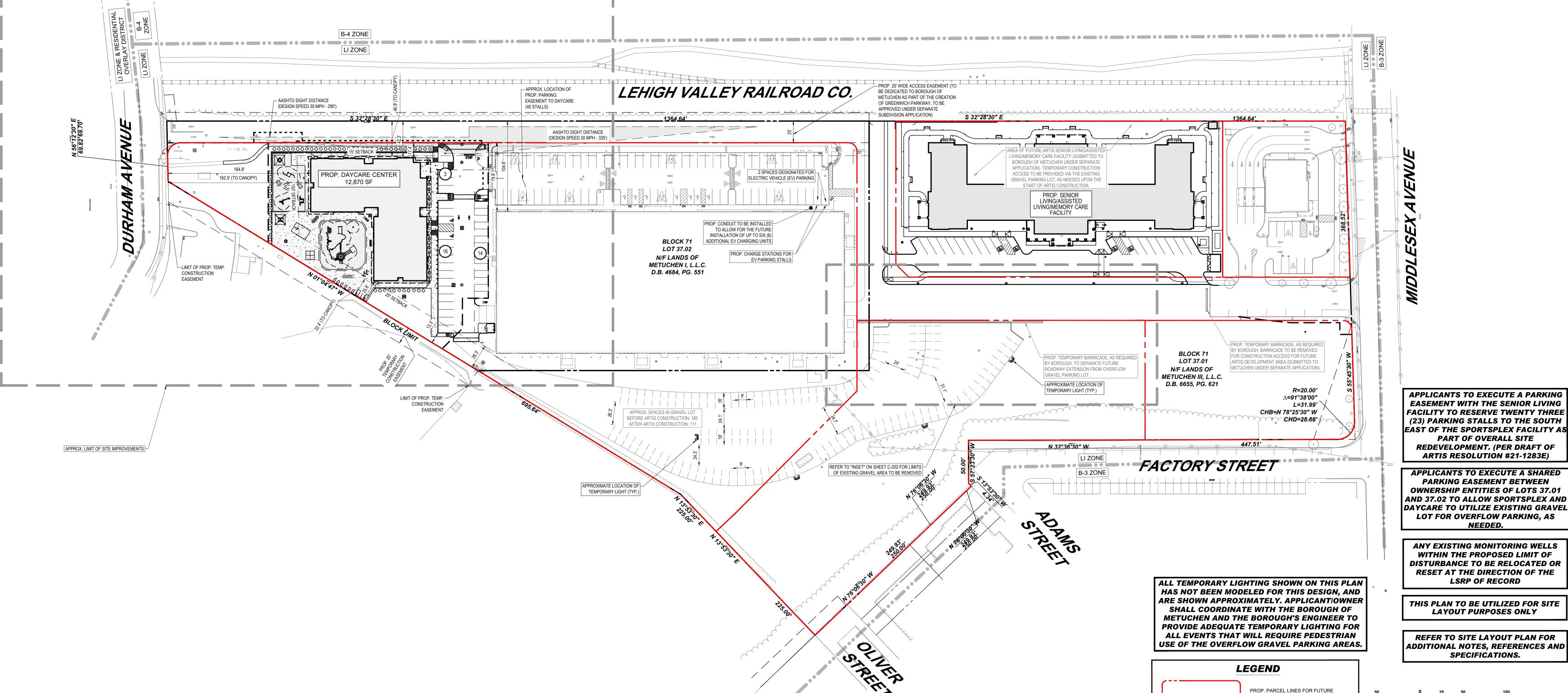
**GRAPHIC SCALE** 

LAYOUT PLAN

**OVERALL SITE** 

C-301

SHEET TITLE:





SITE LAYOUT NOTES

(Rev. 2/2020) 1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY

COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. 2. PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY. 3. ALL DIRECTIONAL/TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS,

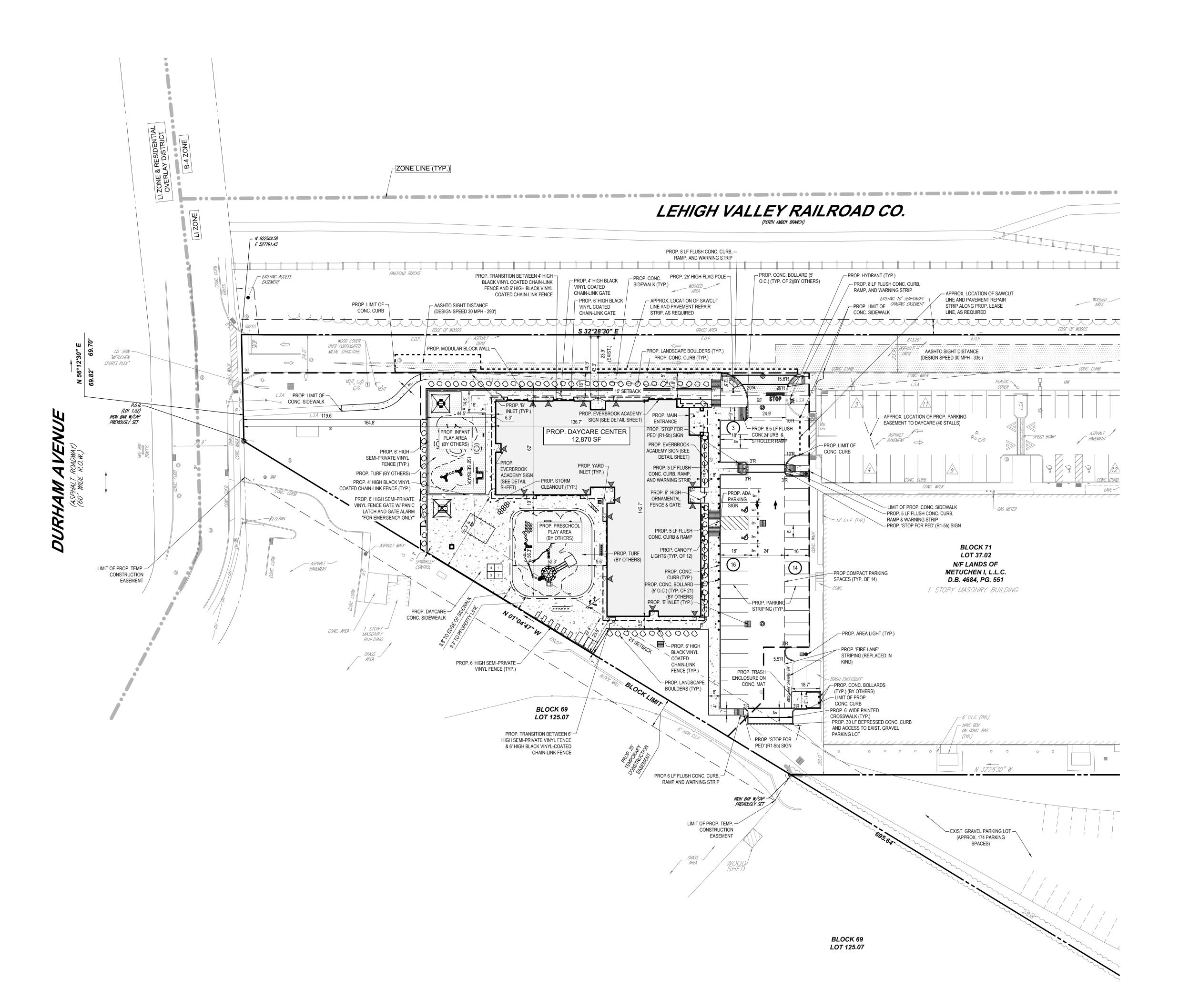
GUIDELINES, RULES, REGULATIONS, STANDARDS AND THE LIKE. 4. THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. THE CONTRACTOR MUST COORDINATE THE

RELOCATION OF TRAFFIC SIGNS WITH THE ENTITY WITH JURISDICTION OVER THE PROJECT. 5. ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN DIMENSION IS TO A PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE.

6. WHEN APPLICABLE, OWNER/ OPERATOR MUST FILE THE NOI FOR NPDES PERMITS AT APPROPRIATE AND/OR REQUIRED TIMEFRAMES BASED UPON THE DESIRED START OF CONSTRUCTION. LAND DISTURBING ACTIVITIES MUST NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED FROM GOVERNING AUTHORITIES (INCLUDING STORMWATER POLLUTION PREVENTION PLAN, PER NJDEP REQUIREMENTS). THE CONTRACTOR MUST STRICTLY ADHERE TO THE APPROVED SWPPP PLAN DURING CONSTRUCTION OPERATIONS (IF PROVIDED)

7. ALL WEATHERED CONCRETE MUST BE AIR ENTRAINED AND INCLUDE THE MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.

8. THE CONTRACTOR MUST REPAIR OR REPLACE, AT THE CONTRACTOR'S SOLE COST AND EXPENSE, ALL SIDEWALKS, CURBS, AND PAVEMENT DAMAGED BY CONSTRUCTION ACTIVITIES WHETHER SPECIFIED ON THIS PLAN OR NOT.



LEGEND
EXISTING PROPOSED
BUILDING
CANOPY
PROPERTY LINE
ADJACENT PROPERTY LINE
ROW LINE
EASEMENT LINE
SAWCUT LINE / LIMIT OF DISTURBANCE
CURB
FLUSH CURB
CURB WALL
RETAINING WALL
PAVEMENT MARKING 🗢
ட் ACCESSIBLE SYMBOL &
PARKING COUNT (19)
AREA LIGHT <b>€</b> □ <b>€</b> □
-•- UTILITY POLE -•-
LIGHT POLE
SIGN / BOLLARD SIGN -
DOOR LOCATION A ENEXT
● BOLLARD ●
6' HIGH BLACK VINYL COATED CHAIN-LINK FENCE
4' HIGH BLACK VINYL COATED CHAIN-LINK FENCE 6' HIGH SEMI-PRIVATE VINYL FENCE
GUIDE RAIL ————
Ø S MANHOLE DRAINAGE / SANITARY
₩ WANHOLE (I)
DRAINAGE INLET
WY GV WATER / GAS VALVE
FIRE HYDRANT 💢
CLEANOUT o C/O

PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184 PENNSYLVANIA LICENSE No. 73909 SHEET TITLE: SITE **LAYOUT** PLAN

C-302

**REVISIONS** 

REV. PER CLIENT

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**ISSUED FOR MUNICIPAL &** 

**AGENCY REVIEW & APPROVAL** 

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENC'
REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCT

DOCUMENT UNLESS INDICATED OTHERWISE.

PRELIMINARY &

FINAL MAJOR

SITE PLAN

MAVEN GROUP experts in real estate since 1991

PROPOSED

DAYCARE

**215 DURHAM AVENUE** 

BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** 

**MIDDLESEX COUNTY, NEW JERSEY** OAKITE SITE REDEVELOPMENT;

TAX MAP SHEET #17

10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001

www.BohlerEngineering.com
NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH000

A. TAMOUS

11/08/2021

JM160715-SPP-2A

DRAWN BY:

CAD I.D.:

CHECKED BY:

REV DATE COMMENT

2 12/23/2021 REV. PER BOROUGH COMMENTS

1 |11/19/2021 | COMMENTS

**REVISION 2 - 12/23/2021** 

LAYOUT PURPOSES ONLY **GRAPHIC SCALE** 1 INCH = 30 FEET

THIS PLAN TO BE UTILIZED FOR SITE

PROPOSED IMPROVEMENTS WITHIN

PLAYGROUND AREAS ARE SHOWN

SCHEMATICALLY FOR REFERENCE

ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR CONSTRUCTION

DETAILS, SPECIFICATIONS, AND OTHER INFORMATION RELATED TO THE PLAYGROUND AREAS.



AREAS (TYP.) \_\_\_\_ ao 1 \_\_\_\_\_ ao 1 \_\_\_\_\_ ao 1 \_\_\_\_ ao 1

CONTRACTOR TO CONFIRM —

ADA PATH MEETS ADA

STANDARDS (REFER TO

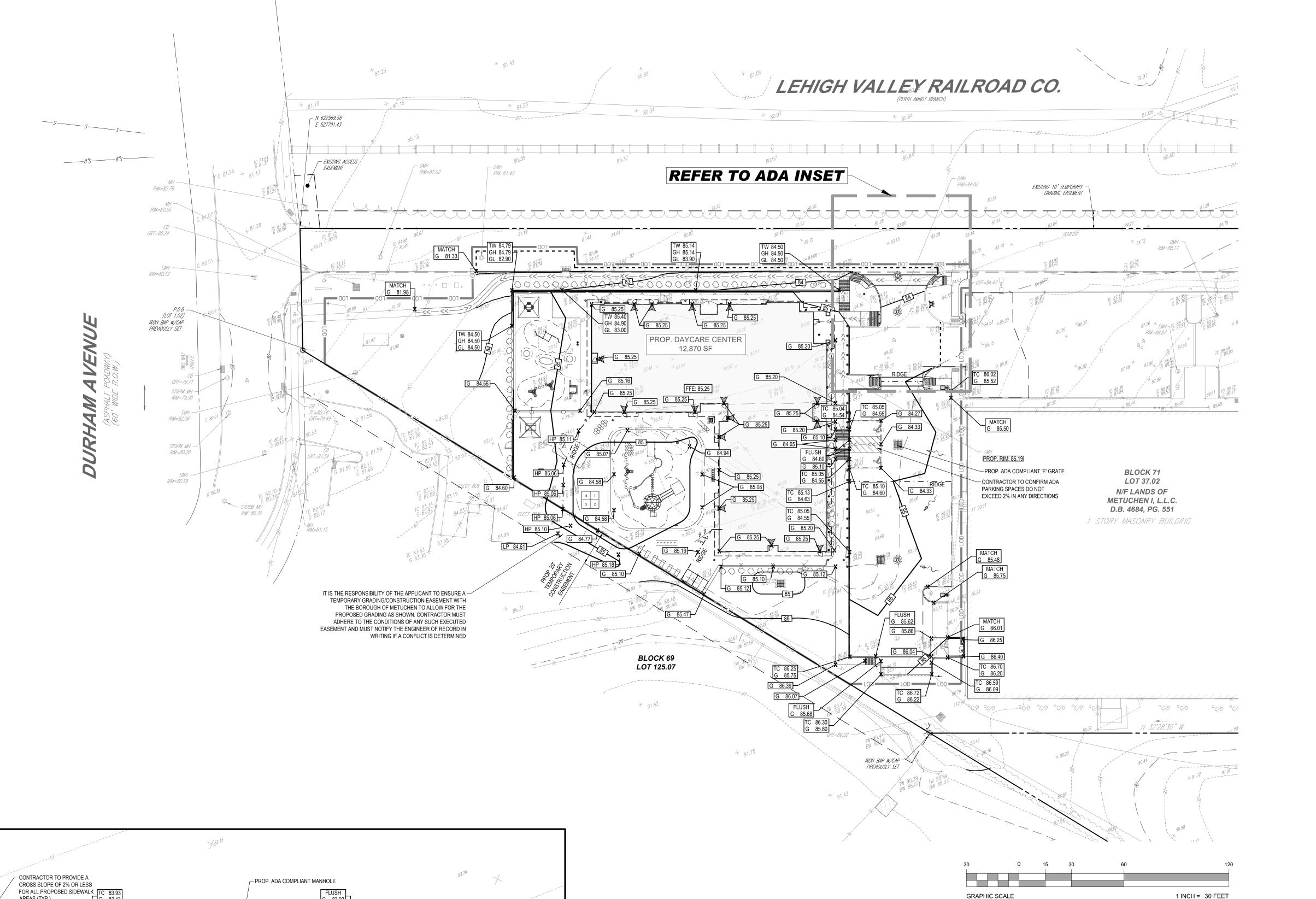
ACCESSIBILITY DESIGN

GUIDELINES)

GRAPHIC SCALE

Towns and the second se

G 85.48



#### **GRADING NOTES**

TO INSTALLING CURBING.

(Rev. 1/2020)

- DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. 2. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET, IF NO GEOTECHNICAL REPORT HAS BEEN REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND
- RECOMMENDATIONS PRIOR TO THE CONTRACTOR COMMENCING THE GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT. THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK.

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT

- 4. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE
- ENGINEER OF RECORD, IN WRITING. 5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED. THIS REPORT MUST VERIFY THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS. RULES. STATUTES, LAWS, ORDINANCES AND CODES WHICH ARE IN EFFECT AND WHICH ARE APPLICABLE TO THE PROJECT, SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL, COMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR
- ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO. 6. IN THE EVENT OF A DISCREPANCY(IES) AND/ÓR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, OF ANY DISCREPANCY(IES) AND/OR CONFLICT(S).
- 7. THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS. 8. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE PAVEMENT GRADE UNLESS OTHERWISE NOTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE ENGINEER OF RECORD APPROVES FINAL CURBING CUT SHEETS PRIOR
- 9. THE CONTRACTOR MUST CONFIRM AND ENSURE THAT AS CONSTRUCTED IMPROVEMENTS CREATE THE FOLLOWING MINIMUM SLOPES (EXCEPT WHERE ADA REQUIREMENTS LIMIT THEM): 1.0% ON ALL CONCRETE SURFACES. 1.5% ON ASPHALT SURFACES. 2% IN LANDSCAPED AREAS AND 0.75% SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS TO PROVIDE POSITIVE DRAINAGE. 10. WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON THE PLANS, TOP AND BOTTOM OF WALL ELEVATIONS (TW & BW) REPRESENT THE PROPOSED FINISHED GRADE AT THE FACE OF WALL AND DO NOT REPRESENT THE ELEVATION OF THE PROPOSED WALL (INCLUDING THE CAP UNIT OR FOOTING). WALL FOOTINGS/FOUNDATION ELEVATIONS WHICH ARE NOT IDENTIFIED HEREIN AND ARE TO BE SET/DETERMINED BY THE CONTRACTOR, MUST BE DETERMINED AND SET BASED UPON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS. THE CONTRACTOR MUST ENSURE THAT LICENSED STRUCTURAL ENGINEER DESIGNS ALL WALLS SHOWN HEREON AND THAT PRIOR TO CONSTRUCTION, THE MUNICIPALITY APPROVES ALL SIGNED AND SEALED SHOP DRAWINGS. FURTHER, THE CONTRACTOR MUST ENSURE THAT FENCING, GUIDERAIL, UTILITIES, AND OTHER SITE AMENITIES IN THE VICINITY OF THE RETAINING WALL(S), PROPOSED
- 11. THE CONTRACTOR MUST ENSURE THAT THERE ARE NO UTILITIES INSTALLED ON THE PASSIVE SIDE OF THE RETAINING WALL. NO EXCAVATION MAY BE PERFORMED ON THE PASSIVE SIDE OF THE RETAINING WALL WITHOUT APPROPRIATELY AND SAFELY SUPPORTING THE WALL IN ACCORDANCE WITH THE STANDARD OF CARE AND ALL APPLICABLE RULES, REGULATIONS, CODES,

SCHEMATICALLY IN THESE PLANS, ARE MATERIALLY CONSIDERED AND INCORPORATED INTO THE RETAINING WALL DESIGN (BY

#### **ACCESSIBILITY DESIGN GUIDELINES**

ORDINANCES, LAWS AND STATUTES.

SUBCHAPTER 7, BARRIER-FREE ACCESS.

1. ALL ACCESSIBLE (A.K.A. ADA) COMPONENTS AND ACCESSIBLE ROUTES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF: (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE COMPLETED.

- 2. THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH INDUSTRY GUIDELINES. 3. THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA). COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, AND INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THE ACCESSIBLE GUIDELINES AND REQUIREMENTS WHICH INCLUDE, BUT ARE
- ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION. B. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED), OR AS SPECIFIED BY THE GOVERNING AGENCY. UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1:20 (5.0%), AN ACCESSIBLE RAMP MUST BE PRÓVIDED. ALONG THE ACCESSIBLE PATH OF TRAVEL, OPENINGS MUST NOT EXCEED 1/2-ÍNCH IN WIDTH.
- VERTICAL CHANGES OF UP TO 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED. . ACCESSIBLE RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES. LEVEL LANDINGS MUST BE VIDED AT EACH END OF ACCESSIBLE RAMPS, LANDING MUST PROVIDE POS AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT
- LANDINGS MUST HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY 60-INCHES. <u>HAND RAILS</u> ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES . ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. <u>LEVEL LANDING</u> MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT
- EXCEED A SLOPE OF 1:12 (8.3%). E. <u>DOORWAY LANDINGS</u> AREAS MÚST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH F TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO FEWER THAN 60-INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2009 AND OTHER
- REFERENCES INCORPORATED BY CODE). F. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD. IN WRITING. OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT
- DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER REE REGULATIONS AND THE ACCESSIBLE GUIDELINES. G. THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE

5. ANY WORK PROPOSED IN THE STATE OF NEW JERSEY MUST CONFORM TO THE NJ UNIFORM CONSTRUCTION CODE

ENGINEER OF RECORD, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE. REPAIR AND/OR REPLACE NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES. 4. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION.

# Call before you dig YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND.

**REVISIONS** 

COMMENT

REV. PER BOROUGH

REV. PER CLIENT

11/19/2021 COMMENTS

2 | 12/23/2021 | COMMENTS

**ISSUED FOR MUNICIPAL & AGENCY REVIEW & APPROVA** 

REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRU

DOCUMENT UNLESS INDICATED OTHERWISE. DRAWN BY:

**CHECKED BY** 

JM160715-GDU-2A PRELIMINARY & FINAL MAJOR



**PROPOSED** DAYCARE 215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN MIDDLESEX COUNTY, NEW JERSEY** 

TAX MAP SHEET #17

OAKITE SITE REDEVELOPMENT;

10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001 www.BohlerEngineering.com NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH000

A. TAMOUS

PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184

PENNSYLVANIA LICENSE No. 73909

SHEET TITLE:

**GRADING PLAN** 

C-401

**REVISION 2 - 12/23/2021** 

**GRAPHIC LEGEND** (U010102 - 03/12/12)

x G 122.95

EXIST. TOP OF CURB ELEVATION

PROP. TOP OF WALL ELEVATION

PROP. GRADE ON HIGH SIDE OF WALL

PROP. GRADE ON LOW SIDE OF WALL

PROP. TOP OF CURB & FINISHED GRADE ELEV.

EXIST. GRADE ELEVATION

EXIST. AREA/YARD LIGHT

PROP. AREA/YARD LIGHT

PROP. CLEAN OUT

EXIST. INLET

PROP. INLET

EXIST. MANHOLE

EXIST. HYDRANT

PROP. HYDRANT

EXIST. UTILITY VALVE

PROP. UTILITY VALVE

EXIST. UTILITY POLE

EXIST. TRAFFIC SIGNAL PROP. TRAFFIC SIGNAL

PROP. UTILITY POLE

PROP. STORM MANHOLE

PROP. SANITARY MANHOLE

THE DESIGN OF THE PROPOSED RETAINING WALL ADJACENT TO THE PROPOSED DAYCARE FACILITY MUST BE SIGNED AND SEALED BY A STRUCTURAL ENGINEER WHO IS LICENSED IN THE STATE OF NEW JERSEY. SHOP DRAWINGS OF THE PROPOSED WALL DESIGN MUST BE PROVIDED TO THE ENGINEER OF **RECORD FOR REVIEW AND APPROVAL** PRIOR TO CONSTRUCTION.

REFER TO SITE LAYOUT PLAN FOR ADDITIONAL NOTES, REFERENCES AND SPECIFICATIONS.

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

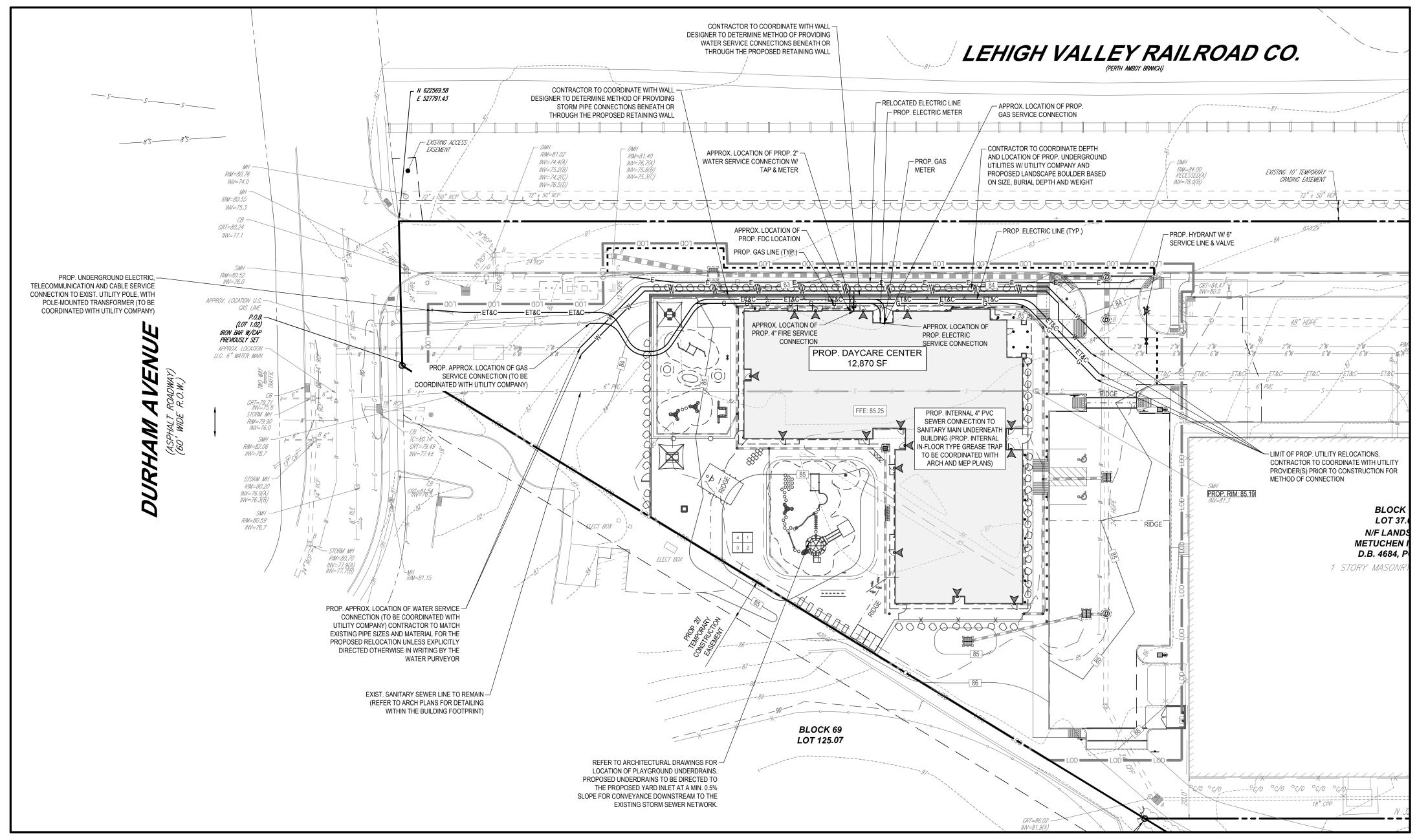
EXIST. CONTOUR & ELEVATION ---- G----- EXIST. GAS E&T-E&T-E&T-E&T-E&T-E&T-E E&T——E&T——PROP. ELECTRIC/TELEPHONE ET&C——ET&C——PROP. ELECTRIC/TELEPHONE/CABLE OH——OH——PROP. OVERHEAD WIRES -S---SOR EXIST. SANITARY PIPE \_\_\_\_\_S \_\_\_\_S \_\_\_\_ **-**✓**-**► PROP. DIRECTION OF DRAINAGE FLOW ARROW EXIST. ELEVATION

OR EXIST. STORM PIPE PROP. STORM PIPE PROP. SANITARY PIPE

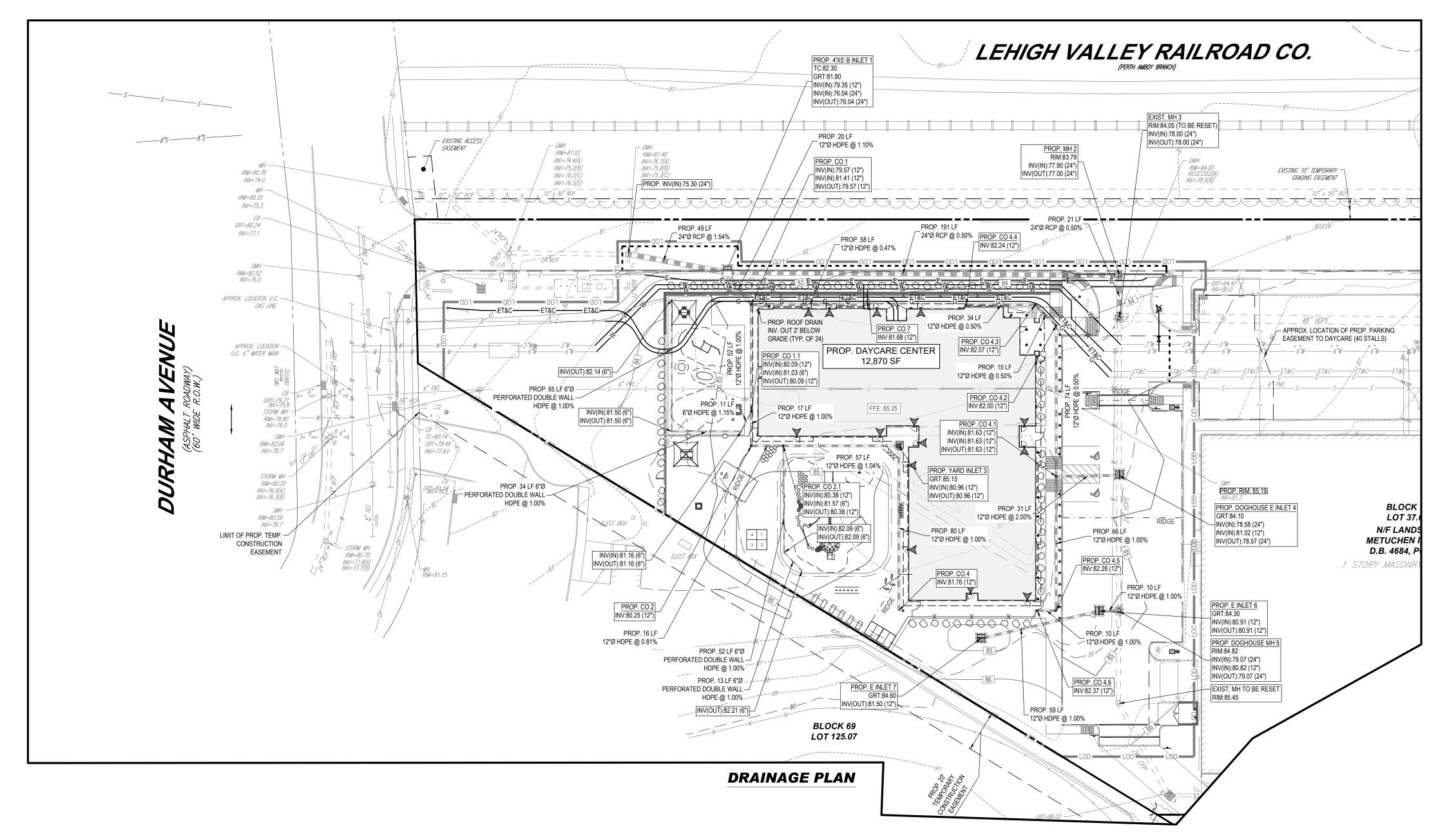
ADA INSET 1 INCH = 10 FEET

/\_\_\_\_\_





**UTILITIES PLAN** 



#### **DRAINAGE AND UTILITY NOTES**

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN. AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY

WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. 2. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE <u>APPROXIMATE</u>, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION

(Rev. 2/2021)

- POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD, PRIOR TO COMMENCING ANY CONSTRUCTION, THE CONTRACTOR MUST REPORT ALL DISCREPANCIES. ERRORS AND OMISSIONS IN WRITING, TO THE ENGINEER OF RECORD. THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION.
- 4. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST PIT TO CONFIRM EXACT DEPTH, PRIOR TO COMMENCEMENT OF CONSTRUCTION. 5. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF SAME BASED UPON FINAL ARCHITECTURAL PLANS.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS; GREASE TRAP REQUIREMENTS; AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, AND PRIOR TO CONSTRUCTION, MUST RESOLVE SAME.
- ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS FILL AND COMPACTION MUST COMPLY WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR DESIGN OF TRENCH BACKFILL OR FOR COMPACTION REQUIREMENTS 8. DURING THE INSTALLATION OF SANITARY, STORM, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS
- AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE. IN ANY RESPECT, FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE APPROPRIATE PLAN(S), WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION OF WORK. 9. THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY.
- WATER AND STORM SYSTEMS. ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME. 10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS.
- I. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION 12. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE

STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

- 13. THE CONTRACTOR'S PRICE FOR WATER SERVICE MUST INCLUDE ALL FEES, COSTS AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE FULL AND COMPLETE WORKING SERVICE. 14. SEWERS CONVEYING SANITARY FLOW, COMBINED SANITARY AND STORMWATER FLOW. OR INDUSTRIAL FLOW MUST BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE GOVERNMENTAL AGENCY WITH JURISDICTION OVER SAME. WHERE APPROPRIATE SEPARATION FROM A WATER MAIN IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL
- SUPPORT FOR THE SEWER MUST BE PROVIDED. 15. WHEN THESE PLANS INVOLVE MULTIPLE BUILDINGS, SOME OF WHICH MAY BE BUILT AT A LATER DATE, THE CONTRACTOR MUST EXTEND ALL LINES, INCLUDING BUT NOT LIMITED TO STORM, SANITARY, UTILITIES, AND IRRIGATION LINES, TO A POINT AT LEAST FIVE (5) FEET BEYOND THE PAVED AREAS FOR WHICH THE CONTRACTOR IS RESPONSIBLE. THE CONTRACTOR MUST CAP ENDS AS APPROPRIATE, MARK LOCATIONS WITH A 2X4 STAKE, AND MUST NOTE THE LOCATION OF ALL OF THE ABOVE ON A CLEAN COPY OF THE PLAN, WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION
- 16. STORM AND SANITARY PIPE LENGTHS INDICATED ARE NOMINAL AND ARE MEASURED FROM CENTER OF INLET AND/OR ANHOLES STRUCTURE TO CENTER OF STRUCTURE. 17. THE CONTRACTOR MUST NOTIFY, IN WRITING, THE MUNICIPAL ENGINEER AT LEAST THREE (3) BUSINESS DAYS PRIOR TO INSTALLATION OF SANITARY COMPONENTS. FAILURE TO HAVE SANITARY INSTALLATION AND TESTING OBSERVED BY THE
- DESIGNATED ENGINEER MAY REQUIRE RE-EXCAVATION OF SANITARY LINE, AND RE-TESTING, WHICH WILL BE DONE AT THE CONTRACTOR'S SOLE COST AND EXPENSE 18. SEWERS CROSSING STREAMS AND/OR LOCATION WITHIN 10 FEET OF THE STREAM EMBANKMENT, OR WHERE SITE CONDITIONS SO INDICATE, MUST BE CONSTRUCTED OF REINFORCED CONCRETE, DUCTILE IRON OR OTHER SUITABLE MATERIAL.
- A. FOR PIPES LESS THAN 12 FEET DEEP: POLYVINYL CHLORIDE (PVC) SDR 35 PER ASTM D3034. B. FOR PIPES GREATER THAN 12 FEET DEEP: POLYVINYL CHLORIDE (PVC) SDR 26 PER ASTM D3034. SANITARY LATERAL MUST BE PVC SCHEDULE 40 OR PVC SDR 26 UNLESS CLEARLY INDICATED OTHERWISE 19. UNLESS CLEARLY INDICATED OTHERWISE, ALL STORM PIPES MUST BE REINFORCED CONCRETE PIPES (RCP) CLASS III WITH SILT/SOIL TIGHT JOINTS. WHEN HIGH-DENSITY POLYETHYLENE PIPE (HDPE) IS CALLED FOR ON THE PLANS, IT MUST CONFORM

TO AASHTO M252 FOR PIPES 4" TO 10" AND TO AASHTO M294 FOR PIPES 12" TO 60" AND TYPE S (SMOOTH INTERIOR WITH ANGULAR CORRUGATIONS) WITH GASKET FOR SILT/SOIL TIGHT JOINT, PIPE FOR ROOF DRAIN CONNECTION MUST BE HDPE SDR

26 OR PVC SCHEDULE 40 UNLESS INDICATED OTHERWISE. HDPE PIPE JOINT GASKETS MUST BE PROVIDED AND CONFORM TO

19. SANITARY PIPE MUST BE POLYVINYL CHLORIDE (PVC) SDR 35 EXCEPT WHERE CLEARLY INDICATED OTHERWISE.

- 21. WATER MAIN PIPING MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL WATER COMPANY. IN THE ABSENCE OF SUCH REQUIREMENTS, WATER MAIN PIPING MUST BE CEMENT-LINED DUCTILE IRON (DIP)
- MINIMUM CLASS 52 THICKNESS. ALL PIPE AND APPURTENANCES MUST COMPLY WITH THE APPLICABLE AWWA STANDARDS IN EFFECT AT THE TIME OF APPLICATION. 22. GAS METERS MUST BE PROTECTED BY BOLLARDS AND FENCES IF INSTALLED WITHIN THE EXTERIOR OF THE BUILDING AS

REQUIRED BY THE JURISDICTIONAL GAS PURVEYOR.

CONTRACTOR TO LOCATE AND UTILIZE EXISTING GAS SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING GAS SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE W/ LOCAL GAS COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY LOCAL GAS COMPANY PRIOR TO COMPLETION. ANY NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION W/ GAS COMPANY. CONTRACTOR SHALL OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

#### WATER SERVICE NOTE

CONTRACTOR TO LOCATE AND UTILIZE EXISTING WATER SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING WATER SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE W/ LOCAL WATER COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY LOCAL WATER COMPANY PRIOR TO COMPLETION. IF EXISTING WATER SERVICE CAN NOT BE UTILIZED THE NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION W/ WATER COMPANY. CONTRACTOR MUST OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

GRAPHIC LEGEND PROPERTY LINE EXIST. CONTOUR & ELEVATION PROP. FINISH GRADE CONTOUR & ELEVATION -W-----W------W-------- EXIST. WATER E&T——E&T——PROP. ELECTRIC/TELEPHONE -ET&C----ET&C----ET&C-----ET&C------EXIST. ELECTRIC/TELEPHONE/CABLE ET&C PROP. ELECTRIC/TELEPHONE/CABLE OH——OH——PROP. OVERHEAD WIRES OR EXIST. STORM PIPE PROP. STORM PIPE or EXIST. SANITARY PIPE PROP. SANITARY PIPE PROP. DIRECTION OF DRAINAGE FLOW ARROW EXIST. ELEVATION EXIST. TOP OF CURB ELEVATION x TC 123.45 × G 122.95 EXIST. GRADE ELEVATION PROP. TOP OF WALL ELEVATION TW XXX XX PROP. GRADE ON HIGH SIDE OF WALL PROP. GRADE ON LOW SIDE OF WALL PROP. TOP OF CURB & FINISHED GRADE ELEV. G XXX.XX EXIST. AREA/YARD LIGHT PROP. AREA/YARD LIGHT PROP. CLEAN OUT EXIST. INLET PROP. INLET EXIST. MANHOLE PROP. STORM MANHOLE PROP. SANITARY MANHOLE EXIST. HYDRANT PROP. HYDRANT EXIST. UTILITY VALVE PROP. UTILITY VALVE EXIST. UTILITY POLE PROP. UTILITY POLE EXIST. TRAFFIC SIGNAL

NO SANITARY SEWER **IMPROVEMENTS ARE PROPOSED OUTSIDE OF THE LIMITS OF THE** PROPOSED DAYCARE BUILDING. REFER TO ARCHITECTURAL & MEP **DRAWINGS FOR INTERNAL SANITARY SEWER CONVEYANCE LINES AND** CONNECTION TO EXISTING SANITARY MAIN BENEATH THE **BUILDING FOUNDATION.** 

**ROOF DRAINS FOR THE PROPOSED** DAYCARE CENTER SHALL TIE INTO UNDERGROUND STORM PIPING. CONTRACTOR TO ENSURE NO SURFACE RUNOFF IS DIRECTED TO THE PLAYGROUND TURF AREA AND NO CLEANOUTS ARE CONSTRUCTED WITHIN PLAYGROUND TURF AREAS.

**REVISIONS** 

EV DATE

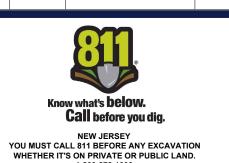
COMMENT

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11/19/2021 COMMENTS

12/23/2021 COMMENTS



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**AGENCY REVIEW & APPROVA** THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGE EVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRU DOCUMENT UNLESS INDICATED OTHERWISE.

**CHECKED BY:** CAD I.D.: JM160715-GDU-2/ PRELIMINARY &

PROJECT No.:

DRAWN BY:

FINAL MAJOR SITE PLAN MAVEN GROUP

**PROPOSED DAYCARE** 215 DURHAM AVENUE

BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN MIDDLESEX COUNTY, NEW JERSEY** OAKITE SITE REDEVELOPMENT; TAX MAP SHEET #17

10000 MIDLANTIC DRIVE. SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001 www.BohlerEngineering.com

A. TAMOUS

PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184

PENNSYLVANIA LICENSE No. 73909

DRAINAGE AND UTILITIES PLAN

C-501

**REVISION 2 - 12/23/2021** 

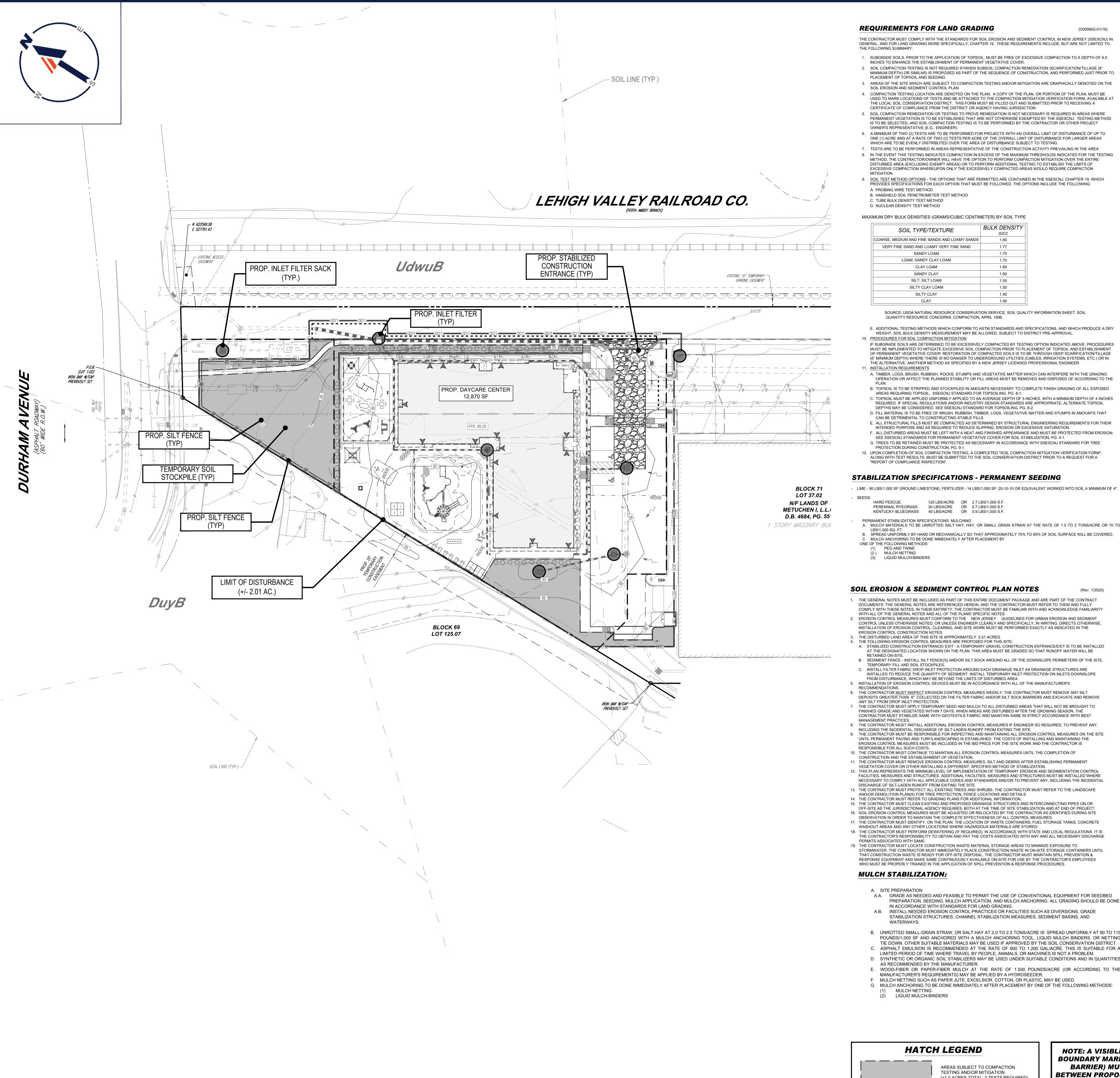
REFER TO SITE LAYOUT PLAN FOR ADDITIONAL NOTES, REFERENCES AND SPECIFICATIONS.

DRAINAGE AND UTILITIES **PURPOSES ONLY** 

**GRAPHIC SCALE** 

1 INCH = 30 FEET

THIS PLAN TO BE UTILIZED FOR



REQUIREMENTS FOR LAND GRADING

- 1. SUBGRADE SOILS, PRIOR TO THE APPLICATION OF TOPSOIL, MUST BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0
- INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. 2. SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION, AND PERFORMED JUST PRIOR TO PLACEMENT OF TOPSOIL AND SEEDING.
- 3. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN. 4 COMPACTION TESTING LOCATION ARE DENOTED ON THE PLAN. A COPY OF THE PLAN. OR PORTION OF THE PLAN. MUST BE USED TO MARK LOCATIONS OF TESTS AND BE ATTACHED TO THE COMPACTION MITIGATION VERIFICATION FORM, AVAILABLE AT
- THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT OR AGENCY HAVING JURISDICTION. 5 SOIL COMPACTION REMEDIATION OR TESTING TO PROVE REMEDIATION IS NOT NECESSARY IS REQUIRED IN AREAS WHERE
- PERMANENT VEGETATION IS TO BE ESTABLISHED THAT ARE NOT OTHERWISE EXEMPTED BY THE SSESCHJ. TESTING METHOD IS TO BE SELECTED, AND SOIL COMPACTION TESTING IS TO BE PERFORMED BY THE CONTRACTOR OR OTHER PROJECT OWNER'S REPRESENTATIVE (E.G., ENGINEER). 6. A MINIMUM OF TWO (2) TESTS ARE TO BE PERFORMED FOR PROJECTS WITH AN OVERALL LIMIT OF DISTURBANCE OF UP TO
- ONE (1) ACRE AND AT A RATE OF TWO (2) TESTS PER ACRE OF THE OVERALL LIMIT OF DISTURBANCE FOR LARGER AREAS WHICH ARE TO BE EVENLY DISTRIBUTED OVER THE AREA OF DISTURBANCE SUBJECT TO TESTING. 7. TESTS ARE TO BE PERFORMED IN AREAS REPRESENTATIVE OF THE CONSTRUCTION ACTIVITY PREVAILING IN THE AREA. 8. IN THE EVENT THIS TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE TESTING METHOD. THE CONTRACTOR/OWNER WILL HAVE THE OPTION TO PERFORM COMPACTION MITIGATION OVER THE ENTIRE DISTURBED AREA (EXCLUDING EXEMPT AREAS) OR TO PERFORM ADDITIONAL TESTING TO ESTABLISH THE LIMITS OF
- 9. SOIL TEST METHOD OPTIONS THE OPTIONS THAT ARE PERMITTED ARE CONTAINED IN THE SSESCHJ, CHAPTER 19, WHICH ROVIDES SPECIFICATIONS FOR EACH OPTION THAT MUST BE FOLLOWED. THE OPTIONS INCLUDE THE FOLLOWING: A. PROBING WIRE TEST METHOD B. HANDHELD SOIL PENETROMETER TEST METHOD

MAXIMUM DRY BULK DENSITIES (GRAMS/CUBIC CENTIMETER) BY SOIL TYPE

SOIL TYPE/TEXTURE	BULK DENSITY G/CC
COARSE, MEDIUM AND FINE SANDS AND LOAMY SANDS	1.80
VERY FINE SAND AND LOAMY VERY FINE SAND	1.77
SANDY LOAM	1.75
LOAM, SANDY CLAY LOAM	1.70
CLAY LOAM	1.65
SANDY CLAY	1.60
SILT, SILT LOAM	1.55
SILTY CLAY LOAM	1.50
SILTY CLAY	1.45
CLAY	1.40

- SOURCE: USDA NATURAL RESOURCE CONSERVATION SERVICE, SOIL QUALITY INFORMATION SHEET, SOIL QUANTITY RESOURCE CONCERNS: COMPACTION, APRIL 1996.
- E. ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED, SUBJECT TO DISTRICT PRE-APPROVAL.
- 10. PROCEDURES FOR SOIL COMPACTION MITIGATION IF SUBGRADE SOILS ARE DETERMINED TO BE EXCESSIVELY COMPACTED BY TESTING OPTION INDICATED ABOVE, PROCEDURES MUST BE IMPLEMENTED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. RESTORATION OF COMPACTED SOILS IS TO BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.) OR IN
- 11. INSTALLATION REQUIREMENTS A. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETATIVE MATTER WHICH CAN INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS MUST BE REMOVED AND DISPOSED OF ACCORDING TO THE
- B. TOPSOIL IS TO BE STRIPPED AND STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISH GRADING OF ALL EXPOSED AREAS REQUIRING TOPSOIL. SSESCNJ STANDARD FOR TOPSOILING, PG. 8-1. C. TOPSOIL MUST BE APPLIED UNIFORMLY APPLIED TO AN AVERAGE DEPTH OF 5 INCHES. WITH A MINIMUM DEPTH OF 4 INCHES REQUIRED. IF SPECIAL REGULATIONS AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE, ALTERNATE TOPSOIL DEPTHS MAY BE CONSIDERED. SEE SSESCNJ STANDARD FOR TOPSOILING, PG. 8-2.
- D. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT CAN BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS. E. ALL STRUCTURAL FILLS MUST BE COMPACTED AS DETERMINED BY STRUCTURAL ENGINEERING REQUIREMENTS FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESSIVE SATURATION.
- F. ALL DISTURBED AREAS MUST BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND MUST BE PROTECTED FROM EROSION. SEE SSESCNJ STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, PG. 4-1. G. TREES TO BE RETAINED MUST BE PROTECTED AS NECESSARY IN ACCORDANCE WITH SSESCHJ STANDARD FOR TREE PROTECTION DURING CONSTRUCTION, PG. 9-1.
- 12. LIPON COMPLETION OF SOIL COMPACTION TESTING A COMPLETED "SOIL COMPACTION MITIGATION VERIFICATION FORM" ALONG WITH TEST RESULTS, MUST BE SUBMITTED TO THE SOIL CONSERVATION DISTRICT PRIOR TO A REQUEST FOR A "REPORT OF COMPLIANCE INSPECTION"

#### STABILIZATION SPECIFICATIONS - PERMANENT SEEDING

120 LBS/ACRE OR 2.7 LBS/1,000 S.F.

- PERENNIAL RYEGRASS: 30 LBS/ACRE OR 0.7 LBS/1,000 S.F. KENTUCKY BLUEGRASS: 40 LBS/ACRE OR 0.9 LBS/1.000 S.F.
- A. MULCH MATERIALS TO BE UNROTTED SALT HAY, HAY, OR SMALL GRAIN STRAW AT THE RATE OF 1.5 TO 2 TONS/ACRE OR 70 TO 90 B. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF SOIL SURFACE WILL BE COVERED. C. MULCH ANCHORING TO BE DONE IMMEDIATELY AFTER PLACEMENT BY
- ONE OF THE FOLLOWING METHODS: PEG AND TWINE MULCH NETTING

I. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY

- WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. . EROSION CONTROL MEASURES MUST CONFORM TO THE NEW JERSEY GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL UNLESS OTHERWISE NOTED, OR UNLESS ENGINEER CLEARLY AND SPECIFICALLY, IN WRITING, DIRECTS OTHERWISE. INSTALLATION OF EROSION CONTROL, CLEARING, AND SITE WORK MUST BE PERFORMED EXACTLY AS INDICATED IN THE EROSION CONTROL CONSTRUCTION NOTES.
- . THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY 2.01 ACRES. THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FOR THIS SITE A. STABILIZED CONSTRUCTION ENTRANCE/ EXIT - A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT IS TO BE INSTALLED
- AT THE DESIGNATED LOCATION SHOWN ON THE PLAN. THIS AREA MUST BE GRADED SO THAT RUNOFF WATER WILL BE B. SEDIMENT FENCE - INSTALL SILT FENCE(S) AND/OR SILT SOCK AROUND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE,
- TEMPORARY FILL AND SOIL STOCKPILES. C. INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND EACH DRAINAGE INLET AS DRAINAGE STRUCTURES ARE INSTALLED TO REDUCE THE QUANTITY OF SEDIMENT. INSTALL TEMPORARY INLET PROTECTION ON INLETS DOWNSLOPE FROM DISTURBANCE, WHICH MAY BE BEYOND THE LIMITS OF DISTURBED AREA. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S
- 6 THE CONTRACTOR MUST INSPECT EROSION CONTROL MEASURES WEEKLY THE CONTRACTOR MUST REMOVE ANY SILT. DEPOSITS GREATER THAN 6" COLLECTED ON THE FILTER FABRIC AND/OR SILT SOCK BARRIERS AND EXCAVATE AND REMOVE ANY SILT FROM DROP INLET PROTECTION.
- THE CONTRACTOR MUST APPLY TEMPORARY SEED AND MULCH TO ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINISHED GRADE AND VEGETATED WITHIN 7 DAYS. WHEN AREAS ARE DISTURBED AFTER THE GROWING SEASON, THE CONTRACTOR MUST STABILIZE SAME WITH GEOTEXTILE FABRIC AND MAINTAIN SAME IN STRICT ACCORDANCE WITH BEST MANAGEMENT PRACTICES
- 8 THE CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER SO REQUIRES, TO PREVENT ANY, INCLUDING THE INCIDENTAL. DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE. 9. THE CONTRACTOR MUST BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE
- EROSION CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS. 10. THE CONTRACTOR MUST CONTINUE TO MAINTAIN ALL EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION AND THE ESTABLISHMENT OF VEGETATION. 11. THE CONTRACTOR MUST REMOVE EROSION CONTROL MEASURES, SILT AND DEBRIS AFTER ESTABLISHING PERMANENT
- EGETATION COVER OR OTHER INSTALLING A DIFFERENT, SPECIFIED METHOD OF STABILIZATION. 12. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL FACILITIES, MEASURES AND STRUCTURES. ADDITIONAL FACILITIES, MEASURES AND STRUCTURES MUST BE INSTALLED WHERE NECESSARY TO COMPLY WITH ALL APPLICABLE CODES AND STANDARDS AND/OR TO PREVENT ANY, INCLUDING THE INCIDENTAL DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE. 13. THE CONTRACTOR MUST PROTECT ALL EXISTING TREES AND SHRUBS. THE CONTRACTOR MUST REFER TO THE LANDSCAPE
- AND/OR DEMOLITION PLAN(S) FOR TREE PROTECTION, FENCE LOCATIONS AND DETAILS. 14. THE CONTRACTOR MUST REFER TO GRADING PLANS FOR ADDITIONAL INFORMATION. 15. THE CONTRACTOR MUST CLEAN EXISTING AND PROPOSED DRAINAGE STRUCTURES AND INTERCONNECTING PIPES ON OR
- OFF-SITE AS THE JURISDICTIONAL AGENCY REQUIRES. BOTH AT THE TIME OF SITE STABILIZATION AND AT END OF PROJECT 16. SOIL EROSION CONTROL MEASURES MUST BE ADJUSTED OR RELOCATED BY THE CONTRACTOR AS IDENTIFIED DURING SITE
- OBSERVATION IN ORDER TO MAINTAIN THE COMPLETE EFFECTIVENESS OF ALL CONTROL MEASURES. 17. THE CONTRACTOR MUST IDENTIFY, ON THE PLAN, THE LOCATION OF WASTE CONTAINERS, FUEL STORAGE TANKS, CONCRETE WASHOUT AREAS AND ANY OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED
- 18. THE CONTRACTOR MUST PERFORM DEWATERING (IF REQUIRED), IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND PAY THE COSTS ASSOCIATED WITH ANY AND ALL NECESSARY DISCHARGE PERMITS ASSOCIATED WITH SAME 19. THE CONTRACTOR MUST LOCATE CONSTRUCTION WASTE MATERIAL STORAGE AREAS TO MINIMIZE EXPOSURE TO STORMWATER. THE CONTRACTOR MUST IMMEDIATELY PLACE CONSTRUCTION WASTE IN ON-SITE STORAGE CONTAINERS UNTIL

#### **MULCH STABILIZATION:**

- A.A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE
- IN ACCORDANCE WITH STANDARDS FOR LAND GRADING A.B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND
- B. UNROTTED SMALL-GRAIN STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS/ACRE IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS/1,000 SF AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
- C. ASPHALT EMULSION IS RECOMMENDED AT THE RATE OF 600 TO 1,200 GAL/ACRE. THIS IS SUITABLE FOR A LIMITED PERIOD OF TIME WHERE TRAVEL BY PEOPLE, ANIMALS, OR MACHINES IS NOT A PROBLEM.
- D. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES
- AS RECOMMENDED BY THE MANUFACTURER. E. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1.500 POUNDS/ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.

HATCH LEGEND

F. MULCH NETTING SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED. G. MULCH ANCHORING TO BE DONE IMMEDIATELY AFTER PLACEMENT BY ONE OF THE FOLLOWING METHODS: (1) MULCH NETTING (2) LIQUID MULCH-BINDERS

> AREAS SUBJECT TO COMPACTION TESTING AND/OR MITIGATION

(2 TESTS PER 1 ACRE REQUIRED)

(±1.0 ACRES TOTAL: 2 TESTS REQUIRED)

#### FREEHOLD SOIL CONSERVATION DISCTRICT SCD NOTES

(O009915 - MARCH 2014) THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.

2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND

RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER. THE DISTURBED AREAS WILL BE MULCHED

WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 ½ TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH

- MAINTAINED LINTIL PERMANENT PROTECTION IS ESTABLISHED 3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS. 4. N.J.S.A 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR
- PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN
- SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY
- 6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR. IN ACCORDANCE WITH STATE STANDARDS. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
- 8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH, ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF. 9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED
- 10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING 11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WIL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS. NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- 12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE
- AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED. 13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL. 14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE
- SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING 15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL. 16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL FROSION AND
- 17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6. HE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN

#### SEQUENCE OF CONSTRUCTION:

AREA GREATER THAN 5.000 SQUARE FEET IS DISTURBED

- PHASE I: INSTALL STONE ANTI TRACKING PAD AND OTHER SOIL EROSION SEDIMENT CONTROL MEASURES INCLUDING GEOTEXTILE TUBES AND SILT
- FENCING. (3 DAY) PHASE 2: DEMOLISH EXISTING PAVEMENT AND CONCRETE STRUCTURES. (1 WEEK) • PHASE 3: CLEAR AND ROUGH GRADE FOR NEW PARKING EXPANSION AND OTHER AREA REQUIRING EXCAVATION. (1 WEEK) • PHASE 4: EXCAVATE FOR RETAINING WALL AND UTILITY TRENCHES. (3 WEEKS)
- PHASE 5: EXCAVATE AND INSTALL ON SITE IMPROVEMENTS INCLUDING CURBING, UNDERGROUND UTILITIES, ETC. (3 MONTHS) • PHASE 6: FINAL GRADING ON SITE. (2 MONTHS) PHASE 7: INSTALL PAVING, CONCRETE, AND FINAL VEGETATION INCLUDING SEEDING AND LANDSCAPING. (1 MONTH)

MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.

#### **SOIL DE-COMPACTION AND TESTING REQUIREMENTS** (www.ni.gov/agriculture/divisions/anr/nrc/nierosion.html)

SOIL COMPACTION TESTING REQUIREMENTS

1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) MUST BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION

3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN MUST BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION MITIGATION VERIFICATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM

4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING MUST BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL

#### COMPACTION TESTING METHODS

- A. PROBING WIRE TEST (SEE DETAIL) B. HAND-HELD PENETROMETER TEST (SEE DETAIL)
- C. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED D. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)

NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.

SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

#### PROCEDURES FOR SOIL COMPACTION MITIGATION

PROCEDURES MUST BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT

TORATION OF COMPACTED SOILS MUST BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

#### **SWPPP NOTES**

CONTRACTOR IS RESPONSIBLE TO MAINTAIN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH EPA REQUIREMENTS FOR SITES WHERE ONE (1) ACRE OR MORE (UNLESS THE LOCAL JURISDICTION REQUIRES FEWER) IS DISTURBED BY CONSTRUCTION ACTIVITIES. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE

#### SEEDBED PREPARATION

A. FERTILIZER MUST BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING. B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH 4-1 STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY JANUARY 2014 A DISC. SPRING-TOOTH HARROW OR OTHER SUITABLE FOUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

#### STABILIZATION SPECIFICATIONS - TEMPORARY SEEDING AND MULCHING:

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS
- PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.) LIME - LIMESTONE APPLICATION RATES ARE TO BE DETERMINED THROUGH SOIL TEST RESULTS. LIMESTONE TO WORKED INTO SOIL A MINIMUM
- PERENNIAL RYE GRASS 100 LBS/ACRE OR OTHER APPROVED SEEDS; PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1 WARM SEASON:
- PEARL MILLET AT 20 LBS/ACRE OR OTHER APPROVED SEEDS: PLANT BETWEEN MAY 15 AND AUGUST 15. MULCH - SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 LBS/1,000 SF TO BE APPLIED ACCORDING TO THE STATE STANDARDS.
- MULCH MUST BE SECURED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

## **STABILIZATION SPECIFICATIONS - PERMANENT SEEDING:**

PERENNIAL RYEGRASS: 45 LBS/ACRE OR 1 LBS/1,000 S.F KENTUCKY BLUEGRASS: 45 LBS/ACRE OR 1 LBS/1,000 S.F

. MULCH ANCHORING TO BE DONE IMMEDIATELY AFTER PLACEMENT BY

- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL MUST BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL MUST BE AMENDED WITH ORGANIC MATTER, AS
- NEEDED. IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS LIME - LIMESTONE APPLICATION RATES ARE TO BE DETERMINED THROUGH SOIL TEST RESULTS. LIMESTONE TO WORKED INTO SOIL A MINIMUM

175 LBS/ACRE OR 4 LBS/1,000 S.F

PERMANENT STABILIZATION SPECIFICATIONS: MULCHING A. MULCH MATERIALS TO BE UNROTTED SALT HAY, HAY, OR SMALL GRAIN STRAW AT THE RATE OF 1.5 TO 2 TONS/ACRE OR 70 TO 90 LBS/1,000 B. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF SOIL SURFACE WILL BE COVERED.

ONE OF THE FOLLOWING METHODS: MULCH NETTING LIQUID MULCH-BINDERS

**NOTE: A VISIBLE CONTAMINATION BOUNDARY MARKER (DEMARCATION** 

BARRIER) MUST BE PROVIDED

**BETWEEN PROPOSED IMPROVEMENTS** 

AND THE EXISTING CAPPED

MATERIAL.

THIS PLAN TO BE UTILIZED FOR SOIL **EROSION AND SEDIMENT CONTROL PURPOSES ONLY** 

1 INCH = 30 FEET **GRAPHIC SCALE** 



COMMENT REV DATE REV. PER CLIENT 1 |11/19/2021 | COMMENTS REV. PER BOROUGH 2 | 12/23/2021 | COMMENTS

ISSUED FOR MUNICIPAL 8 AGENCY REVIEW & APPROVA

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DRAWN BY: CHECKED BY: CAD I.D.: JM160715-SPP-2A

PROJECT No.

PRELIMINARY & FINAL MAJOR

MAVEN GROUP **PROPOSED** 

DAYCARE 215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY OAKITE SITE

REDEVELOPMENT;

TAX MAP SHEET #17 0000 MIDLANTIC DRIVE, SUITE 410W

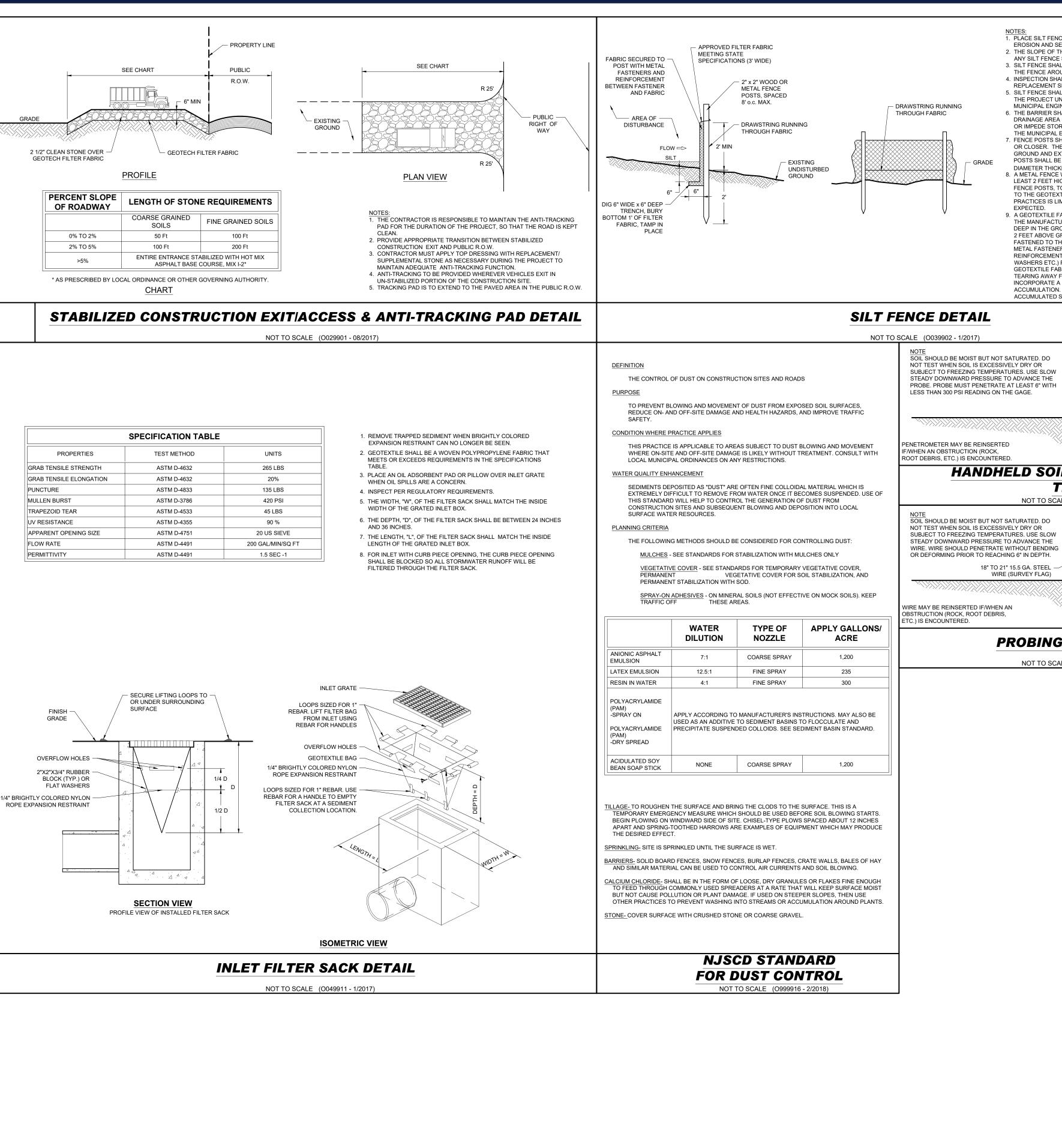
MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001 www.BohlerEngineering.com NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH

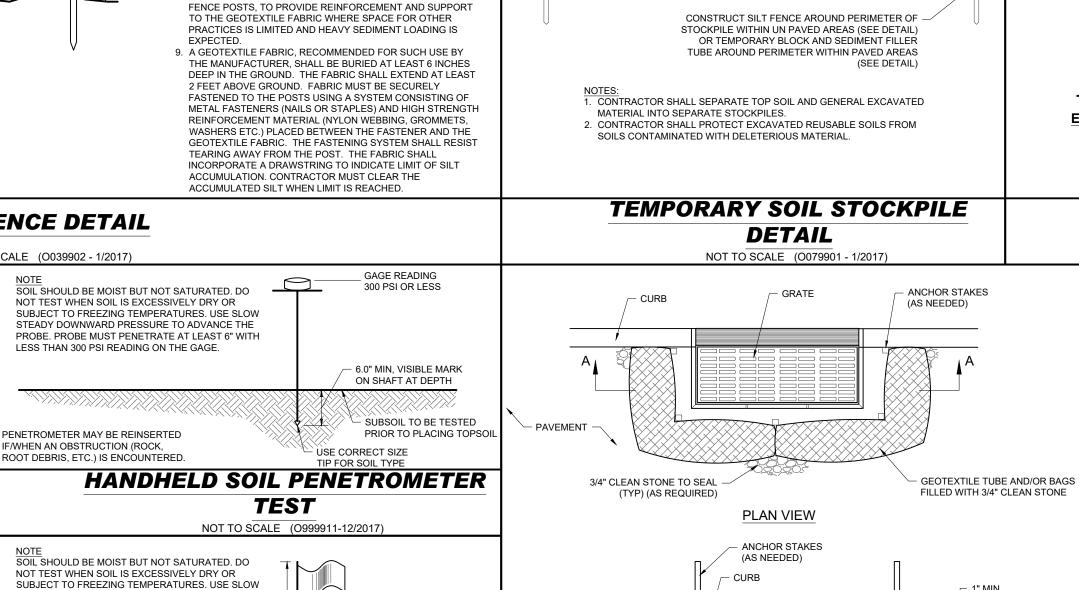
A. TAMOUS

PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184 PENNSYLVANIA LICENSE No. 73909

**SOIL EROSION** & SEDIMENT **CONTROL PLAN** 

C-601





SLOPE (TYP)

GRADE

SECTION A - A

NOTES:

1. PLACE SILT FENCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.

2. THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO

3. SILT FENCE SHALL BE INSTALLED SO WATER CANNOT BYPASS

REPLACEMENT SHALL BE MADE AS PROMPTLY AS POSSIBLE.

5. SILT FENCE SHALL REMAIN IN PLACE FOR THE DURATION OF

THE PROJECT UNLESS OTHERWISE INSTRUCTED BY THE

MUNICIPAL ENGINEER OR SOIL CONSERVATION DISTRICT.

6. THE BARRIER SHALL BE REMOVED WHEN THE CONTRIBUTING

DRAINAGE AREA HAS BEEN STABILIZED SO AS NOT TO BLOCK

OR IMPEDE STORM FLOW OR DRAINAGE AND ACCEPTED BY

7. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER

GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD A MIN.

8. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT

LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE

HOLD WIRE HERE

∠ 6 0" MIN VISIBI F MARK

ON WIRE AT DEPTH

SUBSOIL TO BE TESTED

PRIOR TO PLACING TOPSOIL

18" TO 21" 15.5 GA. STEEL -

WIRE (SURVEY FLAG)

**PROBING WIRE TEST** 

NOT TO SCALE (0999912-12/2017)

OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE

THE MUNICIPAL ENGINEER OR SOIL CONSERVATION DISTRICT

ANY SILT FENCE SHALL NOT EXCEED 5%.

DIAMETER THICKNESS OF 1 ½ INCHES.

4. INSPECTION SHALL BE FREQUENT AND REPAIR OR

THE FENCE AROUND THE SIDES.

- AREA OF SITE CONSTRUCTION TREE PROTECTION FENCE SHALL BE INSTALLED TO FOLLOW TREE CANOPY DRIP LINE OR PROPOSED LIMITS OF DISTURBANCE. 4' HIGH WOOD & WIRE SNOW FENCE W/WOOD STAKES AT A MAXIMUM OF 8' ON CENTER. AS AN OPTION, ORANGE/FLUORESCENT HIGH-DENSITY "VISI-FENCE" OR APPROVED EQUAL CAN BE USED - WOOD & WIRE SNOW FENCE USED AS TREE GUARD TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT. TREE DRIP LINE/TREE PROTECTION ZONE ~ AREA WITHIN TREE PROTECTION ZONE TO REMAIN UNDISTURBED DURING CONSTRUCTION. - 6' WOOD OR STEEL FENCE POSTS AT 8' MAXIMUM CENTER TO CENTER (MINIMUM 2' BELOW

TREE PROTECTION DURING

SITE CONSTRUCTION DETAIL

INC., OR APPROVED EQUIVALENT.

MOVEMENT OF BARRIER.

ENCIRCLE THE DRAIN INLET.

OBSTRUCTIONS AT ALL TIMES.

INLET, BUT NOT OVER THE CURB.

SOIL CONSERVATION DISTRICT.

INLET FILTER | GEOTEXTILE TUBES DETAIL

NOT TO SCALE (0039909 - 4/2017)

NOTES

1. GEOTEXTILE TO BE WOVEN POLYPROPYLENE PRODUCT 117F.

2.  $\mbox{3/4}"$  CLEAN STONE CORE SHALL BE COMPLETELY CONTAINED WITHIN GEOTEXTILE. SEAMS SHALL BE SEWN OR CLOSED BY

SUITABLE MECHANICAL MEANS TO PREVENT LEAKAGE OF

3. ANCHOR STAKES OF WOOD OR METAL SHALL BE INSTALLED

4. WHERE NO CURB IS PRESENT, BARRIER SHALL COMPLETELY

6. THE PROTECTION DEVICE WILL BE DESIGNED TO CAPTURE OR

FILTER RUNOFF FROM THE 1 YEAR, 24 HOUR STORM EVENT AND

STORM SEWER SYSTEM. WHERE SLOPE REQUIRES, AN EARTHEN

SHALL SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO THE

BERM SHALL BE INSTALLED TO DIRECT STORM FLOW INTO THE

7. OTHER METHODS THAT ACCOMPLISH THE PURPOSE OF STORM

8. INSPECTIONS SHALL BE FREQUENT. MAINTENANCE, REPAIR,

AND REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED.

THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING

TOWARDS THE INLET HAS BEEN STABILIZED AND ACCEPTED BY THE MUNICIPAL ENGINEER AND/OR SOIL CONSERVATION

SEWER INLET PROTECTION MAY BE USED IF APPROVED BY THE

5. INLET GRATE OPENING IS TO BE KEPT CLEAR OF

WHERE REQUIRED BY FIELD CONDITIONS TO PREVENT

BY SYNTHETIC INDUSTRIES INC., OR TERRATEX SC, BY WEBTEC

- MAINTAIN STOCK PILE

STABILIZATION NOTES

WITH TEMPORARY

SURFACE IN ACCORDANCE

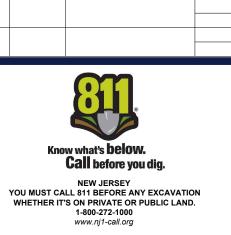
FABRIC TO ENHANCE SEDIMENT WATER FLOW CAPTURE - PUMP DISCHARGE SEDIMENT CONTROL BAG PUMP . CONTRACTOR MUST COMPLY WITH ALL APPLICABLE SOIL CONSERVATION AND NJDEP REQUIREMENTS REGARDING DISCHARGE OF EFFLUENT. 2. A SEDIMENT/SILT CONTROL BAG IS TO BE USED ON EXCAVATION AREA SITE WHERE EXCAVATIONS ARE DEEP AND SPACE IS LIMITED. AND WHEN DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO STREAM OR DRAINAGE SYSTEM IS TO BE AVOIDED. B. BAG MUST BE LOCATED AWAY FROM RECEIVING WATERS AND/OR CONSTRUCTION ACTIVITIES. 4. BAGS MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND FED. STATE. AND LOCAL REGULATIONS. BAGS MAY NOT BE GRADE). 5. DISCHARGE HOSE FROM PUMP MUST BE PLACED IN A STABILIZED AREA DOWN SLOPE OF UNSTABILIZED AREAS TO PREVENT EROSION. 6. MAINTENANCE MUST BE PERFORMED BY THE CONTRACTOR WHEN THE PUMP RUNS DRY AND

> NJ SCD SEDIMENT CONTROL BAG FOR DEWATERING DETAIL NOT TO SCALE (O089906-08/2016)

BAG MAY BE SURROUNDED BY

**NOTE: A VISIBLE CONTAMINATION** BARRIER) MUST BE PROVIDED AND THE EXISTING CAPPED MATERIAL.

**BOUNDARY MARKER (DEMARCATION BETWEEN PROPOSED IMPROVEMENTS** 



**REVISIONS** 

REV DATE

COMMENT

REV. PER BOROUGH

REV. PER CLIENT

1 |11/19/2021 | COMMENTS

2 12/23/2021 COMMENTS

**ISSUED FOR MUNICIPAL &** 

**AGENCY REVIEW & APPROVAL** 

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENC REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUC <u>DOCUMENT</u> UNLESS INDICATED OTHERWISE.

PROJECT No.: DRAWN BY: CHECKED BY: CAD I.D.:

> PRELIMINARY & FINAL MAJOR SITE PLAN

11/08/2021

JM160715-CDS-2A

MAVEN GROUP

**PROPOSED** 

DAYCARE 215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN MIDDLESEX COUNTY, NEW JERSEY** OAKITE SITE

> REDEVELOPMENT; TAX MAP SHEET #17

10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000

Fax: (856) 930-4001 www.BohlerEngineering.com

A. TAMOUS

PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184

PENNSYLVANIA LICENSE No. 73909 **SOIL EROSION** 

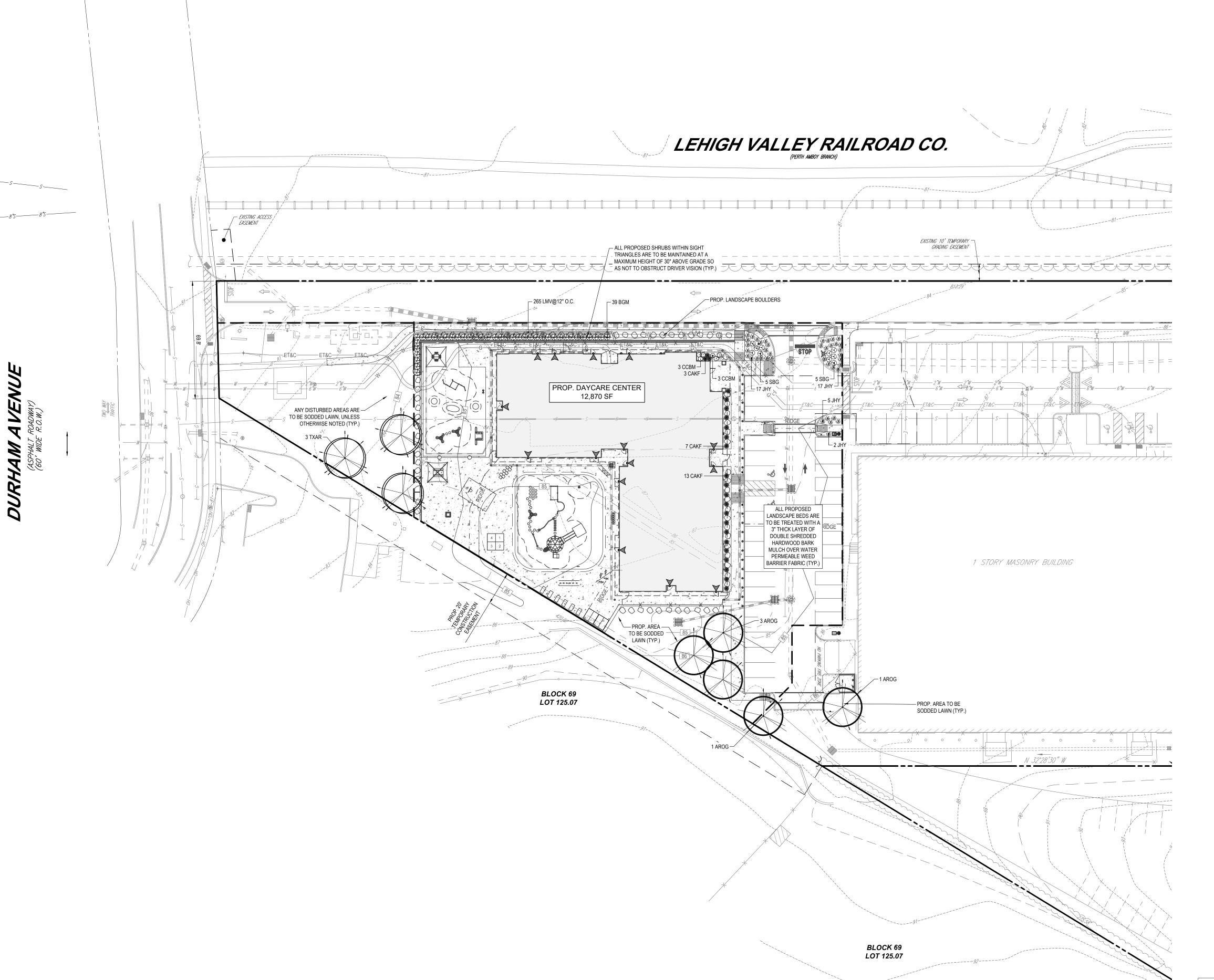
> CONTROL NOTES & **DETAILS**

C-602



		LANDSCAP	E SCHEDULE		
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONT.
SHADE TREE(S)					l
AROG	5	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3" CAL.	B+B
TXAR	3	TILIA AMERICANA 'REDMOND'	REDMOND AMERICAN LINDEN	3" CAL.	B+B
SUBTOTAL:	8				
DECIDUOUS SHRU	B(S)				
ССВМ	6	CARYOPTERIS X CLANDONENSIS 'BLUE MIST'	BLUE MIST SPIREA	24-30"	CONTAINER
SBG	10	SPIRAEA X BUMALDA 'GOLDFLAME'	GOLD FLAME SPIREA	24-30"	CONTAINE
SUBTOTAL:	16				
EVERGREEN SHRU	JB(S)				
BGM	39	BUXUS X GREEN MOUNTAIN	GREEN MOUNTAIN BOXWOOD	24-30"	B+B
JHY	41	JUNIPERUS HORIZONTALIS 'YOUNGSTOWN'	ANDORRA JUNIPER	18-24" SPRD	CONTAINER
SUBTOTAL:	80				
ORNAMENTAL GRA	ASS(ES)				
CAKF	23	CALAMAGROSTIS ARUNDINACEA 'KARL FOERSTER'	FEATHER REED GRASS	2 GAL.	CONTAINE
SUBTOTAL:	23				

SECTION	COMPLIANCE CHA	ART CALCULATIONS	COMPLIANCE	Σ	OR WRITTEN
CHAPTER 110. LAND	A. VEGETATION PRESERVATION. TO THE GREATEST EXTENT POSSIBLE, EXISTING VEGETATION ON THE TRACT IN GOOD HEALTH AND CONDITION SHALL BE PRESERVED. PARTICULAR	EXISTING VEGETATION HAS BEEN PRESERVED WHERE ALLOWABLE.	COMPLIANCE		E WITHOUT PR
DEVELOPMENT  ARTICLE 43. VEGETATION	CONSIDERATION SHALL BE GIVEN TO INDIVIDUAL TREES WITH A DIAMETER AT BREAST HEIGHT OF FOUR INCHES OR GREATER, STANDS OF TREES AND MATURE SHRUBS AND		COMPLIES	ENGINEERING	ANY PURPOS
PRESERVATION AND PROTECTION STANDARDS	HEDGEROWS LOCATED WITHIN YARD SETBACK AND BUFFER AREAS AND GREATER THAN 10 FEET FROM A BUILDING FOUNDATION. THE PLACEMENT OF BUILDINGS, DRIVEWAYS,		COMPLIES	GINE	NT URE A S CES
§110-171 STANDARDS	PARKING LOTS AND OTHER IMPROVEMENTS SHALL TAKE INTO CONSIDERATION THE LOCATION OF EXISTING VEGETATION AND ATTEMPT TO PRESERVE SUCH WHEREVER POSSIBLE.				ANAGEMENT RCHITECTURE ILE DESIGN S SERVICES ION SERVICES SPALINOTE COPED OR USED IN INTERPEDIATION SERVICES
CHAPTER 110. LAND DEVELOPMENT	A. EVERGREEN TREES OR HEDGES. WHERE AN EVERGREEN SCREEN IS UTILIZED, SUCH PLANTINGS SHALL BE SUFFICIENTLY DENSE SO AS TO PROVIDE A MINIMUM OF 75%	EVERGREEN TREES HAVE NOT BEEN PROPOSED.		SULTING	
ARTICLE 44. BUFFERING AND SCREENING GUIDELINES AND STANDARDS	OF THE REQUIRED SCREENING AT TIME OF PLANTING. ARRANGEMENT OF PLANTINGS SHALL BE IN A CONTINUOUS ROW AND MAY BE OVERLAPPED OR STAGGERED WITHIN SUCH	EVERGREEN HEDGES HAVE BEEN PROVIDED WHERE ALLOWABLE TO SOFTEN THE VIEW OF THE PROPOSED WALL ALONG THE ENTRY	COMPLIES	CONS ND SU	APE A APE A AINAE ITTINO ORTA:
§110-174 GENERAL STANDARDS	ROW. PLACEMENT OF SUCH PLANTINGS SHALL PROVIDE MAXIMUM PROTECTION TO EXISTING VEGETATION TO BE PRESERVED LOCATED IN THE BUFFER AREA AND ON ADJACENT PROPERTIES.	DRIVE AND THE BUILDING FOUNDATION.		AND AND	PROGRAM MANA LANDSCAPE ARCH SUSTAINABLE I PERMITTING SEI TRANSPORTATION
	B. DRIVEWAYS AND PARKING LOTS. ALL DRIVEWAYS AND PARKING LOTS SHALL BE SUITABLY BUFFERED AND SCREENED TO MINIMIZE THE IMPACTS OF NOISE, LIGHTING AND GLARE,	PROPOSED PARKING AREA HAS BEEN LOCATED BETWEEN TWO BUILDINGS AND WILL NOT BE SEEN FROM ADJACENT USES.			LAR TRA
	EXHAUST FUMES, VIEWS OF PARKED VEHICLES AND OTHER NUISANCES. BUFFERING AND SCREENING SHALL MINIMIZE SUCH IMPACTS BOTH WITHIN THE SITE ITSELF, AS WELL AS	EXISTING BUFFERING TO REMAIN AND ADDITIONAL PLANTINGS HAVE BEEN PROPOSED ALONG THE FOUNDATION OF THE		SIE	NAND CONTE
	FROM ADJACENT AND NEARBY PROPERTIES AND PUBLIC RIGHTS-OF-WAY AS FOLLOWS:	BUILDING WHERE ALLOWABLE.	COMPLIES		TION, DESIGN
	B(1). BUFFERING SHALL CONSIST OF A MINIMUM FIVE-FOOT-WIDE AREA SURROUNDING ALL SIDES OF A PARKING LOT EXPOSED TO VIEW. WHERE SUCH PARKING AREA			ш	THE INFORM
	IS LOCATED ON A TRACT ADJACENT TO A RESIDENTIAL USE OR DISTRICT, SUCH BUFFERING SHALL CONSIST OF A MINIMUM TEN-FOOT-WIDE AREA SURROUNDING ALL SIDES OF A PARKING			2514101	0.W0
	LOT EXPOSED TO VIEW.  B(2). SCREENING SHALL CONSIST OF A MINIMUM FOUR-FOOT-HIGH VISUALLY IMPERVIOUS SCREEN TO BE	PROPOSED PARKING AREA HAS BEEN LOCATED BETWEEN TWO BUILDINGS AND WILL		REVISI	MMENT DRAW
	LOCATED WITHIN THE BUFFERING AREA. WHERE SUCH PARKING AREA IS LOCATED ON A TRACT ADJACENT TO A RESIDENTIAL USE OR DISTRICT, SUCH SCREENING SHALL CONSIST OF A MINIMUM SIX-FOOT-HIGH VISUALLY IMPERVIOUS	NOT BE SEEN FROM ADJACENT USES. EXISTING BUFFERING TO REMAIN AND ADDITIONAL PLANTINGS HAVE BEEN PROPOSED ALONG THE FOUNDATION OF THE	COMPLIES	REV DATE CO  1 11/19/2021 REV. PER COMMEN	CLIENT N
	SCREEN. THE HEIGHT OF ANY REQUIRED SCREEN SHALL DECREASE TO A MAXIMUM OF THREE FEET IN HEIGHT WHERE DRIVEWAYS APPROACH SIDEWALKS OR WALKWAYS, IN ORDER	BUILDING WHERE ALLOWABLE.	OOIVII EILO		BOROUGH M
	TO PROVIDE ADEQUATE VISIBILITY OF PEDESTRIANS FROM MOTOR VEHICLES. C. LOADING AREAS. ALL LOADING AREAS, INCLUDING LOADING	LOADING AREAS HAVE NOT BEEN PROPOSED.			
	DOCK AREAS OF BUILDINGS AND DRIVEWAYS PROVIDING ACCESS TO THE SAME, SHALL BE SUITABLY BUFFERED AND SCREENED TO MINIMIZE THE IMPACTS OF NOISE, LOADING AND				
CHAPTER 110. LAND	UNLOADING ACTIVITIES, LIGHTING AND GLARE, EXHAUST FUMES, VIEWS OF LOADING AND UNLOADING VEHICLES AND OTHER NUISANCES. BUFFERING AND SCREENING SHALL				
DEVELOPMENT	MINIMIZE SUCH IMPACTS BOTH WITHIN THE SITE ITSELF, AS WELL AS FROM ADJACENT AND NEARBY PROPERTIES AND PUBLIC RIGHTS-OF-WAY, AS FOLLOWS:		NOT APPLICABLE		
ARTICLE 44. BUFFERING AND SCREENING GUIDELINES AND STANDARDS	C(1). BUFFERING SHALL CONSIST OF A MINIMUM TEN-FOOT-WIDE AREA SURROUNDING ALL SIDES OF A LOADING AREA EXPOSED TO VIEW. WHERE SUCH LOADING AREA IS				
§110-175 SPECIFIC STANDARDS	AREA EXPOSED TO VIEW. WHERE SUCH LOADING AREA IS LOCATED ON A TRACT ADJACENT TO A RESIDENTIAL USE OR DISTRICT, SUCH BUFFERING SHALL CONSIST OF A MINIMUM TWENTY-FIVE-FOOT-WIDE AREA SURROUNDING ALL SIDES OF A				
	PARKING LOT EXPOSED TO VIEW.  C(2). SCREENING SHALL CONSIST OF A MINIMUM TEN-FOOT-HIGH VISUALLY IMPERVIOUS SCREEN. IF SUCH	LOADING AREAS HAVE NOT BEEN PROPOSED.			
	SCREEN CONSISTS OF A WALL OR FENCE, THE BUFFER AREA BETWEEN THE WALL OR FENCE AND THE LOT LINE SHALL BE A MINIMUM OF 10 FEET IN WIDTH AND SHALL ALSO BE		NOT APPLICABLE		
	EXTENSIVELY PLANTED WITH BOTH DECIDUOUS AND EVERGREEN TREES.  D. DISPOSAL AND COLLECTION AREAS. ALL AREAS USED FOR	A MINIMUM FOUR-FOOT-WIDE PLANTING AREA			
	SOLID WASTE DISPOSAL AND RECYCLABLE COLLECTION FACILITIES SHALL BE SUITABLY BUFFERED AND SCREENED TO MINIMIZE THE IMPACTS OF NOISE, ODORS, DISPOSAL AND	HAS BEEN PROVIDED ALONG THE TWO SIDES OF THE PROPOSED TRASH ENCLOSURE, AND THE THIRD ABUTS THE EXISTING BUILDING,			
	COLLECTION ACTIVITIES AND VIEWS OF COLLECTION BINS AND DUMPSTERS. BUFFERING AND SCREENING SHALL MINIMIZE SUCH IMPACTS BOTH WITHIN THE SITE ITSELF, AS WELL AS	THEREBY SCREENING THE ENCLSURE.			
	FROM ADJACENT AND NEARBY PROPERTIES AND PUBLIC RIGHTS-OF-WAY.		COMPLIES		
	(1) BUFFERING SHALL CONSIST OF A MINIMUM FOUR-FOOT-WIDE AREA SURROUNDING ALL SIDES OF SUCH FACILITY EXPOSED TO VIEW. IF SUCH FACILITY IS LOCATED ON A SITE ADJACENT TO A RESIDENTIAL USE OR DISTRICT, SUCH				
	BUFFERING SHALL CONSIST OF A MINIMUM TEN-FOOT-WIDE AREA SURROUNDING ALL SIDES OF SUCH FACILITY EXPOSED TO VIEW.				
	D.(2) SCREENING SHALL CONSIST OF A MINIMUM SIX-FOOT-HIGH MASONRY WALL, SOLID WOODEN FENCE OR ACCESSORY BUILDING WITH GATES OR DOORS AND RAMPED	THE WALLS OF THE PROPOSED TRASH ENCLOSURE HAVE BEEN SCREENED WITH EVERGREEN PLANTINGS AT A MINIMUM			
	ACCESS TO FACILITATE THE MOVEMENT OF BINS OR DUMPSTERS. THE BASE OF SUCH SCREEN SHALL BE PLANTED WITH A MINIMUM FOUR-FOOT-HIGH EVERGREEN HEDGE ALONG	HEIGHT OF 6-7'.	COMPLIES		
	THE SIDES AND REAR OF SAME.  B. GENERAL STANDARDS. THE FOLLOWING GENERAL STANDARDS SHALL BE USED TO PREPARE AND REVIEW	PLANT SPECIES APPROPRIATE IN TERMS OF FUNCTION AND SIZE, AND HARDY FOR THE			
	LANDSCAPING FOR ANY DEVELOPMENT PLAN:  B(1). PLANT SPECIES. THE SELECTION OF PLANT SPECIES TO BE USED SHALL BE APPROPRIATE IN TERMS OF FUNCTION AND	CLIMATIC ZONE IN WHICH THE BOROUGH IS LOCATED HAVE BEEN PROPOSED THROUGHOUT THE SITE.			
	SIZE AND SHALL BE HARDY FOR THE CLIMATIC ZONE IN WHICH THE BOROUGH IS LOCATED. CONSIDERATION SHALL BE GIVEN TO SOIL CONDITIONS, AVAILABILITY OF WATER, EXPOSURE TO	-( REFER TO LANDSCAPE SCHEDULE FOR PLANT SPECIES AND SIZES.)-	COMPLIES		
	SUNLIGHT AND OTHER EXISTING CONDITIONS. PLANTINGS SHALL BE SELECTED FROM THE RECOMMENDED BOROUGH PLANT LIST.				
	B(2). PLANTING SIZES. DECIDUOUS TREES SHALL HAVE A MINIMUM CALIPER OF THREE INCHES AT TIME OF PLANTING. EVERGREEN TREES SHALL BE A MINIMUM OF SIX FEET IN	-( REFER TO LANDSCAPE SCHEDULE FOR PLANT SPECIES AND SIZES.)-			
	HEIGHT AT TIME OF PLANTING. LOW-GROWING EVERGREEN SHRUBS SHALL BE A MINIMUM OF 2 1/2 FEET IN HEIGHT AT TIME OF PLANTING. SIZE OF OTHER PLANTINGS SHALL DEPEND ON		COMPLIES		
CHAPTER 110. LAND	SETTING AND TYPE OF PLANT MATERIAL.  B(3). PLANTING SPECIFICATIONS. ONLY NURSERY-GROWN PLANT MATERIAL SHALL BE UTILIZED. ALL TREES, SHRUBS AND	-( REFER TO NOTE 2(F) IN THE LANDSCAPE SPECIFICATIONS ON THE LANDSCAPE NOTES		81	
DEVELOPMENT  ARTICLE 45. LANDSCAPING DESIGN GUIDELINES AND	GROUND COVER SHALL BE PLANTED ACCORDING TO ACCEPTED HORTICULTURAL STANDARDS AND THE BOROUGH'S APPROVED PLANTING SPECIFICATIONS. ALL GRASS SHALL BE PLANTED IN ACCORDANCE WITH THE NEW JERSEY STATE SOIL	AND DETAILS SHEET)-	COMPLIES	Know what's be	elow.
STANDARDS  §110-177 GUIDELINES AND	CONSERVATION COMMITTEE'S STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL IN NEW JERSEY, CURRENT EDITION.			Call befor	<b>e you dig.</b> sey
GENERAL STANDARDS	B(5). MAINTENANCE. PLANTINGS SHALL BE WATERED REGULARLY AND IN A MANNER APPROPRIATE FOR THE SPECIFIC PLANT MATERIAL THROUGH THE FIRST GROWING	LANDSCAPE AREAS SHALL BE WELL MAINTAINED AND KEPT FREE OF ALL DEBRIS, RUBBISH, WEEDS, TALL GRASS, OTHER		YOU MUST CALL 811 BEFOR WHETHER IT'S ON PRIVATI 1-800-272-1 www.nj1-cal	E OR PUBLIC LAND. 000
	SEASON. ALL LANDSCAPED AREAS SHALL BE WELL MAINTAINED AND KEPT FREE OF ALL DEBRIS, RUBBISH, WEEDS, TALL GRASS, OTHER OVERGROWN CONDITIONS AND THE STORAGE	OF ANY EQUIPMENT OR MATERIALS.	COMPLIES	ISSUED FOR M	LINICIDAL 9
	OF ANY EQUIPMENT OR MATERIALS.	-( REFER TO OWNER MAINTENANCE NOTES AND NOTE 11 IN THE LANDSCAPE SPECIFICATIONS ON THE LANDSCAPE NOTES		AGENCY REVIEW	
	B(6). REPLACEMENT OF DEAD PLANTINGS. THE DEVELOPER SHALL BE REQUIRED TO REPLACE DEAD OR DYING PLANT	& DETAILS SHEET.)( REFER TO NOTE 12(A) IN THE LANDSCAPE SPECIFICATIONS ON THE LANDSCAPE NOTES		THIS DRAWING IS INTENDED FOR IN REVIEW AND APPROVAL. IT IS NOT IN DOCUMENT UNLESS INDIC	ITENDED AS A CONSTRUCT
	MATERIAL FOR A PERIOD OF TWO YEARS FROM THE DATE OF ISSUANCE OF A FINAL ZONING PERMIT FOR OCCUPANCY AND SHALL POST A MAINTENANCE GUARANTY FOR SUCH PURSUANT TO ARTICLE 58 OF THIS CHAPTER. IF PLANT	& DETAILS SHEET.)-	COMPLIES	PROJECT No.:	JM1607
	MATERIAL IS DEAD OR DYING DURING A PLANTING SEASON, IT SHALL BE REPLACED THAT SAME SEASON. IF PLANT MATERIAL IS DEAD OR DYING A NONPLANTING SEASON, IT SHALL		CONICTIES	DRAWN BY: CHECKED BY: DATE:	ML/ 11/08/20
	BE REPLACED AS SOON AS IS REASONABLY POSSIBLE AT THE START OF THE NEXT PLANTING SEASON.  A. PARKING LOTS. THE INTERIOR AREA OF ALL PARKING LOTS	TOTAL PARKING AREA: 9,466 SF		CAD I.D.: PROJECT:	JM160715-LND-
	SHALL BE LANDSCAPED TO PROVIDE VISUAL RELIEF FROM THE UNDESIRABLE AND MONOTONOUS APPEARANCE OF EXTENSIVE PARKING AREAS AND TO PROVIDE SHADING THAT	1		PRELIMIN	VARY &
	WILL REDUCE SOLAR HEAT GAIN TO BOTH THE SURFACE OF THE PARKING LOT AND VEHICLES PARKED THEREON. SUCH LANDSCAPED AREAS SHALL BE PROVIDED IN PROTECTED	,		FINAL M	
	PLANTING ISLANDS OR PENINSULAS WITHIN THE PERIMETER OF THE PARKING LOT AND SHALL BE PLACED SO AS NOT TO OBSTRUCT THE VISION OF MOTORISTS. THE AREA AND TYPES			SITE P	
	OF PLANTINGS SHALL BE PROVIDED BASED ON THE NUMBER OF PARKING SPACES IN THE LOT, AS FOLLOWS:			Maven Ge	
CHAPTER 110. LAND DEVELOPMENT	A(2). FOR PARKING LOTS WITH 11 OR MORE SPACES, A MINIMUM OF 5% OF THE INTERIOR AREA OF THE PARKING LOT SHALL BE LANDSCAPED WITH A MINIMUM OF ONE DECIDUOUS TREE PLANTED FOR EVERY FIVE PARKING SPACES. THE		COMPLIES	experts in real esta	
	REMAINDER OF ANY SUCH INTERIOR PLANTING AREAS NOT CONTAINING TREES SHALL BE PLANTED WITH LOW-GROWING EVERGREEN SHRUBS. IF ALL OF THE ABOVE REQUIRED TREES			PROPOS DAYCA	
ARTICLE 45. LANDSCAPING DESIGN GUIDELINES AND STANDARDS	CAN NOT ALL DE LOCATED WITHIN CHOLLINTEDIOD DI ANTINO			215 DURHAM	
DESIGN GUIDELINES AND	CAN NOT ALL BE LOCATED WITHIN SUCH INTERIOR PLANTING AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN LOCATIONS DIRECTLY SURROUNDING THE PERIMETER OF THE		11	BLOCK 71; LOTS BOROUGH OF	
DESIGN GUIDELINES AND STANDARDS §110-178 SPECIFIC	AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN	TOTAL PARKING SPACES: 40 REQUIRED: 40 / 5 = 8 TREES		MIDDLESEX COUNT	
DESIGN GUIDELINES AND STANDARDS §110-178 SPECIFIC	AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN LOCATIONS DIRECTLY SURROUNDING THE PERIMETER OF THE			MIDDLESEX COUNT OAKITE REDEVELO	Y, NEW JERSE` SITE PMENT;
DESIGN GUIDELINES AND STANDARDS §110-178 SPECIFIC	AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN LOCATIONS DIRECTLY SURROUNDING THE PERIMETER OF THE PARKING LOT.	REQUIRED: 40 / 5 = 8 TREES PROPOSED: 8 TREES	20115-1	MIDDLESEX COUNT OAKITE	Y, NEW JERSE` SITE PMENT;
DESIGN GUIDELINES AND STANDARDS §110-178 SPECIFIC	AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN LOCATIONS DIRECTLY SURROUNDING THE PERIMETER OF THE PARKING LOT.  B. FOUNDATION PLANTINGS. THE BASE OF ALL SIDES OF A BUILDING SHALL BE PLANTED WITH FOUNDATION PLANTINGS CONSISTING OF EVERGREEN AND/OR SEMI-EVERGREEN	REQUIRED: 40 / 5 = 8 TREES  PROPOSED: 8 TREES  FOUNDATION PLANTINGS HAVE BEEN PROVIDED ALONG ALL SIDES OF THE PROPOSED BUILDINGS WHERE ALLOWABLE, AND ARE SPACED AT AN AVERAGE OF THREE FEET ON CENTER.  -( REFER TO LANDSCAPE SCHEDULE FOR	COMPLIES	MIDDLESEX COUNT OAKITE REDEVELO TAX MAP SH	Y, NEW JERSE' SITE PMENT; IEET #17
DESIGN GUIDELINES AND STANDARDS §110-178 SPECIFIC STANDARDS	AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN LOCATIONS DIRECTLY SURROUNDING THE PERIMETER OF THE PARKING LOT.  B. FOUNDATION PLANTINGS. THE BASE OF ALL SIDES OF A BUILDING SHALL BE PLANTED WITH FOUNDATION PLANTINGS CONSISTING OF EVERGREEN AND/OR SEMI-EVERGREEN SHRUBS AND TREES. SUCH PLANTINGS SHALL BE A MINIMUM OF TWO FEET HIGH AT TIME OF PLANTING AND SPACED AN AVERAGE OF THREE FEET ON CENTER.  A. LOCATION AND SPACING. SHADE TREES SHALL BE PROVIDED AT INTERVALS OF APPROXIMATELY 30 TO 35 FEET ALONG EACH	REQUIRED: 40 / 5 = 8 TREES  PROPOSED: 8 TREES  FOUNDATION PLANTINGS HAVE BEEN PROVIDED ALONG ALL SIDES OF THE PROPOSED BUILDINGS WHERE ALLOWABLE, AND ARE SPACED AT AN AVERAGE OF THREE FEET ON CENTER.  -( REFER TO LANDSCAPE SCHEDULE FOR PLANT SPECIES AND SIZES.)-  EXISTING TREES ALONG DURHAM AVE ARE TO	COMPLIES	MIDDLESEX COUNT OAKITE REDEVELO TAX MAP SH  BOHLE BOHLER ENGINEE	Y, NEW JERSEY SITE PMENT; HEET #17
DESIGN GUIDELINES AND STANDARDS  §110-178 SPECIFIC	AREAS, THEN SUCH REMAINING TREES SHALL BE PLANTED IN LOCATIONS DIRECTLY SURROUNDING THE PERIMETER OF THE PARKING LOT.  B. FOUNDATION PLANTINGS. THE BASE OF ALL SIDES OF A BUILDING SHALL BE PLANTED WITH FOUNDATION PLANTINGS CONSISTING OF EVERGREEN AND/OR SEMI-EVERGREEN SHRUBS AND TREES. SUCH PLANTINGS SHALL BE A MINIMUM OF TWO FEET HIGH AT TIME OF PLANTING AND SPACED AN AVERAGE OF THREE FEET ON CENTER.  A. LOCATION AND SPACING. SHADE TREES SHALL BE PROVIDED AT INTERVALS OF APPROXIMATELY 30 TO 35 FEET ALONG EACH SIDE OF ALL STREETS, PUBLIC OR PRIVATE, EXISTING OR PROPOSED. IN ADDITION, THE BOARD MAY ALSO REQUIRE ADDITIONAL SHADE TREES TO BE MASSED AT CRITICAL POINTS	REQUIRED: 40 / 5 = 8 TREES  PROPOSED: 8 TREES  FOUNDATION PLANTINGS HAVE BEEN PROVIDED ALONG ALL SIDES OF THE PROPOSED BUILDINGS WHERE ALLOWABLE, AND ARE SPACED AT AN AVERAGE OF THREE FEET ON CENTER.  -( REFER TO LANDSCAPE SCHEDULE FOR PLANT SPECIES AND SIZES.)-  EXISTING TREES ALONG DURHAM AVE ARE TO	COMPLIES	MIDDLESEX COUNT OAKITE REDEVELO TAX MAP SH  BOHLE BOHLER ENGINEE  100000 MIDLANTIC DR MOUNT LAURE Phone: (856	Y, NEW JERSE) SITE PMENT; HEET #17  ERING NJ, LLC  RIVE, SUITE 410V L, NJ 08054 6) 930-4000
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# OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL. TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO
  THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL
  SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS. FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

REFER TO NOTES AND REFERENCES SHEET FOR ADDITIONAL NOTES, REFERENCES AND SPECIFICATIONS.

REFER TO LANDSCAPE **NOTES & DETAILS SHEET** 

LANDSCAPE PURPOSES ONLY 0 15 30 **GRAPHIC SCALE** 

THIS PLAN TO BE UTILIZED FOR 1 INCH = 30 FEET

REV. PER CLIENT 12/23/2021 REV. PER BOROUGH COMMENTS

JM160715-LND-2A PRELIMINARY &

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CERT. OF AUTHORIZATION NO. 24GA28161700 & MH000122

LICENSED LANDSCAPE ARCHITECT NEW JERSEY LICENSE No. 21AS00112200

SHEET TITLE:

*LANDSCAPE* PLAN

C-701

### PLANT MATERIAL SPACED AS — SPECIFIED ON CENTER (O.C.) (SEE SPACING ON LANDSCAPE PLAN) INCORPORATE 2" OF PEAT INTO 6" OF -PLANTING MIXTURE, AS SPECIFIED 2-3" SHREDDED HARDWOOD BARK MULCH.

NOT TO SCALE (L101102-01/2013)

PERENNIAL/GROUND COVER PLANTING DETAIL

NOT TO SCALE (L101101-01/2013)

#### STANDARD FOR PERMANENT STABILIZATION

#### WITH SOD

(L021102 - 06/2012

#### METHODS AND MATERIALS

- 1. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
- SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME
- OF CUTTING (FXCLUDES TOP GROWTH) SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10 PERCENT OF THE STRIP. BROKEN

PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.

- 5. FOR DRAUGHT SITES, A SOD OF KENTUCKY 31 TALL FESCUE AND BLUEGRASS IS PREFERRED OVER A STRAIGHT BI UFGRASS SOD
- ONLY MOIST, FRESH, UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

#### I. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR LIMING, FERTILIZING, AND SOIL PREPARATION. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING INSTALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES, SUCH AS INTERCEPTOR

DITCHES, DIKES AND TERRACES, EROSION STOPS, AND DE-SILTING BASINS.

#### II. SOIL PREPARATION

- A. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL FERTILIZER MAY BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1.000 SQUARE FEET OF 10-20-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED IN LIEU OF TOP-DRESSING. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS:
  - SOIL TEXTURE TONS/ACRE LBS/1000 SQ. FT
- SANDY LOAM, LOAM, SILT LOAM LOAMY SAND, SAND

CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL

- PULVERIZED DOLOMITE LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE
- WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCOING OPERATION SHOULD BE ON THE GENERAL CONTOLIR CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED.

REMOVE FROM THE SURFACE ALL OBJECTS THAT WOULD PREVENT GOOD SOD TO SOIL CONTACT AND REMOVE ALL OTHER DEBRIS. SUCH AS WIRE, CABLE, TREE ROOTS.

THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED,

- A. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES. THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE
- SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD. B. PLACE SOD STRIPS WITH SNUG, EVEN JOINTS THAT ARE STAGGERED. OPEN
- SPACES INVITE FROSION ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS
- SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD
- PEGS. WIRE STAPLES. OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE). SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER CARRYING CHANNELS AND

OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN

CHANNEL WORK. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS. AND CONTINUE

IRRIGATION THROUGHOUT ENTIRE SEASON.

#### IV. TOP-DRESSING

IF SLOW RELEASE NITROGEN (300 POLINDS 38-0-0 PER ACRE OR FOLIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER. THEN A FOLLOW-UP OF TOP DRESSING IS NOT

10-20-10 OR EQUIVALENT AT 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE

- A. SPRING INSTALLATION OF SOD WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS
- FFFT BETWEEN MARCH 15 AND APRIL 1 B. FALL INSTALLATION OF SOD WILL REQUIRE THE ABOVE APPLICATION TO OCCUR BETWEEN SEPTEMBER 1 AND OCTOBER 15.

#### LANDSCAPE SPECIFICATIONS

- THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING. FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE
- A. GENERAL ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE MOST CURRENT VERSION OF THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT OF NOT LESS THAN 5% BY WEIGHT AND A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF
- ALL DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS. C. LAWN - ALL DISTURBED AREAS ARE TO BE COVERED WITH A MINIMUM 5" THICK LAYER OF TOPSOIL AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SEEDING SPECIFICATION ON THE APPROVED SOIL EROSION PLAN.
  - a. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED. b. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS OF AT LEAST ¾". SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD THE SOD IN PLACE.
  - D. MULCH ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE SPECIFIED OR DEPICTED ON THE LANDSCAPE PLAN.
- a. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE b. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE AS SPECIFIED OR, AS A MINIMUM, 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT.
- A FERTILIZER SHOULD NOT BE PURCHASED OR APPLIED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY AND THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT OR ENGINEER. F. PLANT MATERIAL
- a. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN) b. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIA
- c. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER BOTANICAL NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION. d. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 11/4", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE
- e. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL EXHIBIT NORMAL GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE INSECTS PESTS EGGS OR LARVAE f. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND

REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.

- INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL
- GENERAL WORK PROCEDURES THE CONTRACTOR SHALL UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF. B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT
- SHALL BE REMOVED COMPLETELY FROM THE SITE A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH THE GENERAL WORK PROCEDURES OUTLINED HEREIN.
- B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. THE CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR THE DURATION OF THE PROJECT AND WARRANTY
- PERIOD FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. THE CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
- C. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF N.J.S.A. 48:2-74, et seg., THE UNDERGROUND UTILITY PROTECTION ACT, IN PARTICULAR, THE CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR
- AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON WOOD/STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE
- C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL
- CONSTRUCTION ACTIVITY HAS BEEN COMPLETED. D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE. SOIL MODIFICATIONS CONTRACTOR SHALL OBTAIN A SOIL TEST FOR ALL AREAS OF THE SITE AND SUBMIT THE SAME TO THE LANDSCAPE ARCHITECT OR ENGINEER FOR APPROVAL PRIOR TO
- CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY. B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS AS SPECIFIED HEREIN OR DIRECTED BY THE LANDSCAPE ARCHITECT OR ENGINEER. IN WRITING, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON
- SITE CONDITIONS.
- C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY. D. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED
- LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5. E. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL SYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED
- F. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX. FINISHED GRADING

  A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING
- WITHIN THE DISTURBANCE AREA OF THE SITE. B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT A PROPER SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).
- C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT. D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.
- A. CONTRACTOR SHALL PROVIDE A 5" THICK MINIMUM LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS B. ON-SITE TOPSOIL MAY, UPON THE PROVISION OF A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY AND THE SUBMISSION TO AND APPROVAL BY THE LANDSCAPE ARCHITECT OR ENGINEER BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED
- C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION
- D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA): a. 20 POUNDS 'GROW POWER' OR APPROVED EQUA
- 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.
- A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE. B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
- C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
- D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
- E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY AD ILISTMENTS AS DIRECTED F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED.
- INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS: a. PLANTS: MARCH 15 TO DECEMBER 15 b. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
- PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR
- SHOULD CONTACT APPROVING AGENCY, LANDSCAPE ARCHITECT AND/OR ENGINEER FOR POTENTIAL SUBSTITUTIONS G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN

AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS RECOMMENDED THAT THESE SPECIES NOT BE PLANTED DURING THE FALL PLANTING SEASON:

- ACER RUBRUM PLATANUS X ACERIFOLIA BETULA VARIETIES POPULUS VARIETIES CARPINUS VARIETIES PRUNUS VARIETIES
- CRATAEGUS VARIETIES PYRUS VARIETIES KOELREUTERIA QUERCUS VARIETIES
- LIQUIDAMBAR STYRACIFLUA TII IA TOMENTOSA LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES H. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH
- PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY b. 1 PART COMPOSTED COW MANURE BY VOLUME
- c. 3 PARTS TOPSOIL BY VOLUME d. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
- 2 TABLETS PER 1 GALLON PLANT 3 TABLETS PER 5 GALLON PLANT
- 4 TABLETS PER 15 GALLON PLANT
- LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY. J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE
- PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL. K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE
- . GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION. M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, PERENNIALS/ANNUALS SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND
- N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE
- O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN. A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
- B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT. SUN AND WIND. C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
- ). UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE
- REPLACED AT THE OWNER'S REQUEST OR IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES. A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN
- SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT REQUIRED TO ENSURE THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES
- ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH A THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 2 YEARS FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE LANDSCAPE ARCHITECT AND/OR ENGINEER AND THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT

- APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE. B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN
- OF INSECTS AND DISEASE. D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

REQUIRED TO PROVIDE.

CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

> THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

#### OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO. THE FOLLOWING:

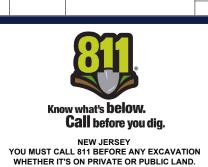
 TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL. TREES WITHIN VEHICULAR SIGHT LINES AS ILLUSTRATED ON THE LANDSCAPE PLAN ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.

• VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS. FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING. SLIPPING OR ANY OTHER

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS



REV DATE REV. PER CLIENT 1 11/19/2021 COMMENTS REV. PER BOROUGH 2 |12/23/2021 | COMMENTS



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11/08/202

JM160715-LND-2A



SITE PLAN

PROPOSED DAYCARE

215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY OAKITE SITE REDEVELOPMENT;

TAX MAP SHEET #17



www.BohlerEngineering.com NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH0

LICENSED LANDSCAPE ARCHITECT NEW JERSEY LICENSE No. 21AS0011220

HEET TITLE: **LANDSCAPE** 

> **NOTES & DETAILS**





1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT

(Rev. 1/2020)

**REVISIONS** 

COMMENT REV. PER CLIENT

REV DATE

1 11/19/2021 COMMENTS

2 12/23/2021 REV. PER BOROUGH COMMENTS

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PRELIMINARY &

FINAL MAJOR

SITE PLAN

MAVEN GROUP

PROPOSED DAYCARE

215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY OAKITE SITE REDEVELOPMENT; TAX MAP SHEET #17

10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001

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A. TAMOUS

PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 46184 PENNSYLVANIA LICENSE No. 73909

**LIGHTING** 

PLAN

SHEET TITLE:

JM160715-LGT-2A

PROJECT No.: DRAWN BY:

**CHECKED BY:** 

CAD I.D.:

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COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. 2. THE LIGHTING CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL AGENCY AND GOVERNMENTAL REGULATIONS.

3. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES

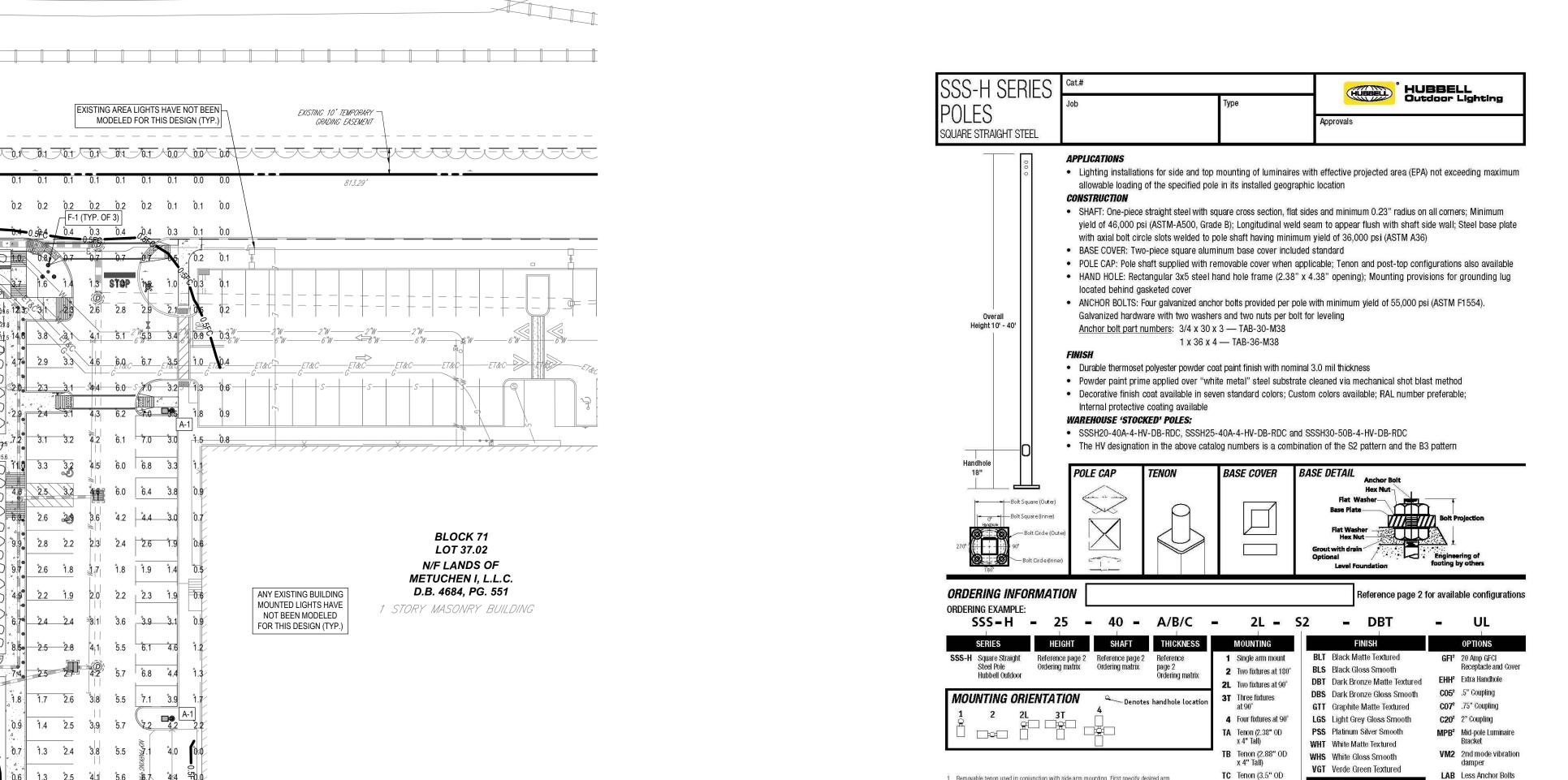
AND OTHER RELATED VARIABLE FIELD CONDITIONS. 4. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOT-CANDLES (FC). 5. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND RE-LAMPING ACCORDING TO MANUFACTURER RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN. UPON COMPLETION AND OWNER'S ACCEPTANCE OF THE WORK, THE ABOVE RESPONSIBILITIES BECOMES SOLELY THE OWNER'S. 6. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING

AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, MECHANICAL ENGINEER'S AND/OR LIGHTING CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE LIGHTING CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES. 7. THE CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES,

OR OTHER STRUCTURE(S) TO THE ENGINEER OF RECORD'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. 8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED. 9. THE ACTUAL LIGHTING LEVELS MUST BE VERIFIED IN THE FIELD AND FIXTURES ADJUSTED ACCORDINGLY, BY THE CONTRACTOR TO ACHIEVE THE APPROVED LIGHT LEVELS.

10. ILLUMINATION LEVELS SHOWN ON THE PLAN HAVE BEEN CALCULATED FOR PROPOSED LIGHTS ONLY. ACTUAL ILLUMINATION LEVELS IN THE FIELD MAY DIFFER FROM THOSE DEPICTED ON THE PLAN DUE TO INTERFERENCE FROM EXISTING/AMBIENT LIGHTS WHOSE ILLUMINATION LEVELS ARE NOT REFLECTED ON THIS PLAN.

11. ILLUMINATION LEVELS SHOWN ON THE PLAN WERE CALCULATED WITH LIGHTING DESIGN SOFTWARE AGI32 BY LIGHTING



CONTRACTOR TO COORDINATE LIGHT POLE SPECIFICS W/ LIGHT POLE COLOR TO MATCH FIXTURE: BRONZE

ration followed by the "TR" notation. Example: SSS-H-25-40-A-1-S2-TR-DB y option location using logic found on page 2 (Option Orientation)

> 1st mode vibration damper 2nd mode vibration damper

ACCESSORIES- Order Separately

LIGHT POLE SPECIFICATION

NOT TO SCALE

x 6" Tall)

OT Open Top (in-

HUBBELL
Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

Color Option

DRILL PATTERN

B3 2 bolt (2-1/2" spacing), Viper "A" arm

\$2 2 bolt (3-1/2" spacing), Viper "AD" arm

TR¹ Removable Tenon CC Custom Color

cludes pole cap) **B1** Cruzer, "AM" arm

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CALCULATION SUMMARY							
LOCATION	UNITS	AVG.	MAX.	MIN.	AVG./MIN.	MAX./MIN.	
PARKING AREA - DAYCARE	FC	3.61	7.1	0.7	5.16	10.14	I II—
WALKWAYS - DAYCARE	FC	4.29	12.0	0.7	6.13	17.14	FI

		l f		
		MUNICIPAL	REQUIREMEN	ITS
MIN.	MAX./MIN.	PER SECTION: 110-1	30. E. DECORATIVE LAMPPOST	S.
		LOCATION	REQUIRED	PROPOSED
3	10.14 17.14	EXTERIOR OF A SITE WITH GREATER THAN 100 FEET OF STREET FRONTAGE SHALL PROVIDE DECORATIVE LAMPPOSTS	STREET FRONTAGE >100'	STREET FRONTAGE - 69.8' (NOT APPLICABLE)
		PER SECTION: 1	110-157. DESIGN STANDARDS	
		LOCATION	REQUIRED	PROPOSED
		MAXIMUM MOUNTING HEIGHT	20' OR HEIGHT OF THE BUILDING (WHICHEVER IS LESS)	20' (COMPLIES)
		AVERAGE MAINTAINED HORIZONTAL ILLUMINATION FOR DRIVEWAYS AND PARKING AREAS (NONRESIDENTIAL USE)	0.9 FC	3.61 - 4.18 FC (COMPLIES)
		AVERAGE MAINTAINED HORIZONTAL ILLUMINATION FOR WALKWAYS AND ALL OTHER AREAS (NONRESIDENTIAL USE)	0.9 FC	2.55 - 4.29 FC (COMPLIES)

**GRAPHIC SCALE** 

REFER TO NOTES AND REFERENCES SHEET FOR ADDITIONAL NOTES, REFERENCES AND SPECIFICATIONS.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

REFER TO DETAIL SHEET FOR LIGHT POLE FOUNDATION DETAIL

1 INCH = 30 FEET

LAB Less Anchor Bolts

C-703

**REVISION 2 - 12/23/2021** 

	LUMINAIRE SCHEDULE										
SYMBOL QTY	TY LABEL	LABEL	MTG. HT.	DESCRIPTION	ARRNGMNT.	LUMENS	LLF	COLOR TEMP.	IES FILENAME	CATALOG#	
2	2 A-1	A-1	20'	HUBBELL OUTDOOR LIGHTING RATIO RAR2 SERIES LED AREA LIGHT	SINGLE	31,844	0.900	4000K	RAR2-480L-240-4K7-4W.IES	RAR2-480L-240-4K7-4W-XXX-XXX-ASQ-DBS	
<b>⊕</b> 13	13 C-1	C-1	12'	PHILIPS LIGHTOLIER 6" DOWNLIGHT (REFER TO ARCHITECTURAL DRAWINGS)	SINGLE	2,000	0.900	4000K	Z4RDL20835WSQHZ10U.IES	-REFER TO ARCHITECUTRAL DRAWINGS FOR ORDERING INFORMATION-	
<b>a</b> 4	4 H	Н	8'-8"	VISA LIGHTING OW1333 - AVATAR SERIES LED WALL MOUNTED LIGHT (REFER TO ARCHITECTURAL DRAWINGS)	SINGLE	1,700	0.900	4000K	OW1333-L35K-H.IES	-REFER TO ARCHITECUTRAL DRAWINGS FOR ORDERING INFORMATION-	
<b>a</b> 15	15 W-EM	W-EM	-VARIES. SEE PLAN-	LEOTEK ESETA (ES1) SERIES LED WALL SCONCE (REFER TO ARCHITECTURAL DRAWINGS)	SINGLE	3,301	0.900	4000K	IES ES1-24H-MV-NW-W-XX-350 082115.IES	-REFER TO ARCHITECUTRAL DRAWINGS FOR ORDERING INFORMATION-	
⊕ 3	3 F-1	F-1 G	GROUND LEVEL	ECOSENSE RISE LED FLAG POLE LIGHT	SINGLE	1,120	N/A	4000K	N/A	F080-1S-HO-40-8-40-K-X	
⊕ 3	3 F-1	F-1 G	PLAN- GROUND LEVEL			-,			082115.IES	ORDERING IN	

N 32°28'30" W

LEHIGH VALLEY RAILROAD CO.

IRON BAR W/CAP — PREVIOUSLY SET

2. ARCHITECTURAL BUILDING MOUNTED LIGHTS HAVE BEEN MODELED FOR REFERENCE PURPOSES ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ORDERING INFORMATION AND FIXTURE SPECIFICS.

EXISTING AREA LIGHTS HAVE NOT BEEN

MODELED FOR THIS DESIGN (TYP.)

W-EM @ 9'-3"

LOT 125.07

APPROXIMATE LOCATION -

OF 0.5 FC ISOLINE (TYP.)

PROP. DAYCARE CENTER

APPROXIMATE LOCATION

OF 0.5 FC ISOLINE (TYP.)

W-EM @ 9'-3" W-EM @ 9'-3"



HUBBELL OUTDOOR

**LIGHTING RATIO RAR2** 

SERIES LED AREA LIGHT

NOT TO SCALE



DOWNLIGHT (C-1)

NOT TO SCALE



AVATAR SERIES LED

**WALL MOUNTED LIGHT** 

NOT TO SCALE

E 527791.43

LIGHTS HAVE NOT BEEN MODELED FOR THIS

DESIGN (TYP.)

IRON BAR W/CAP

PREVIOUSLY SET

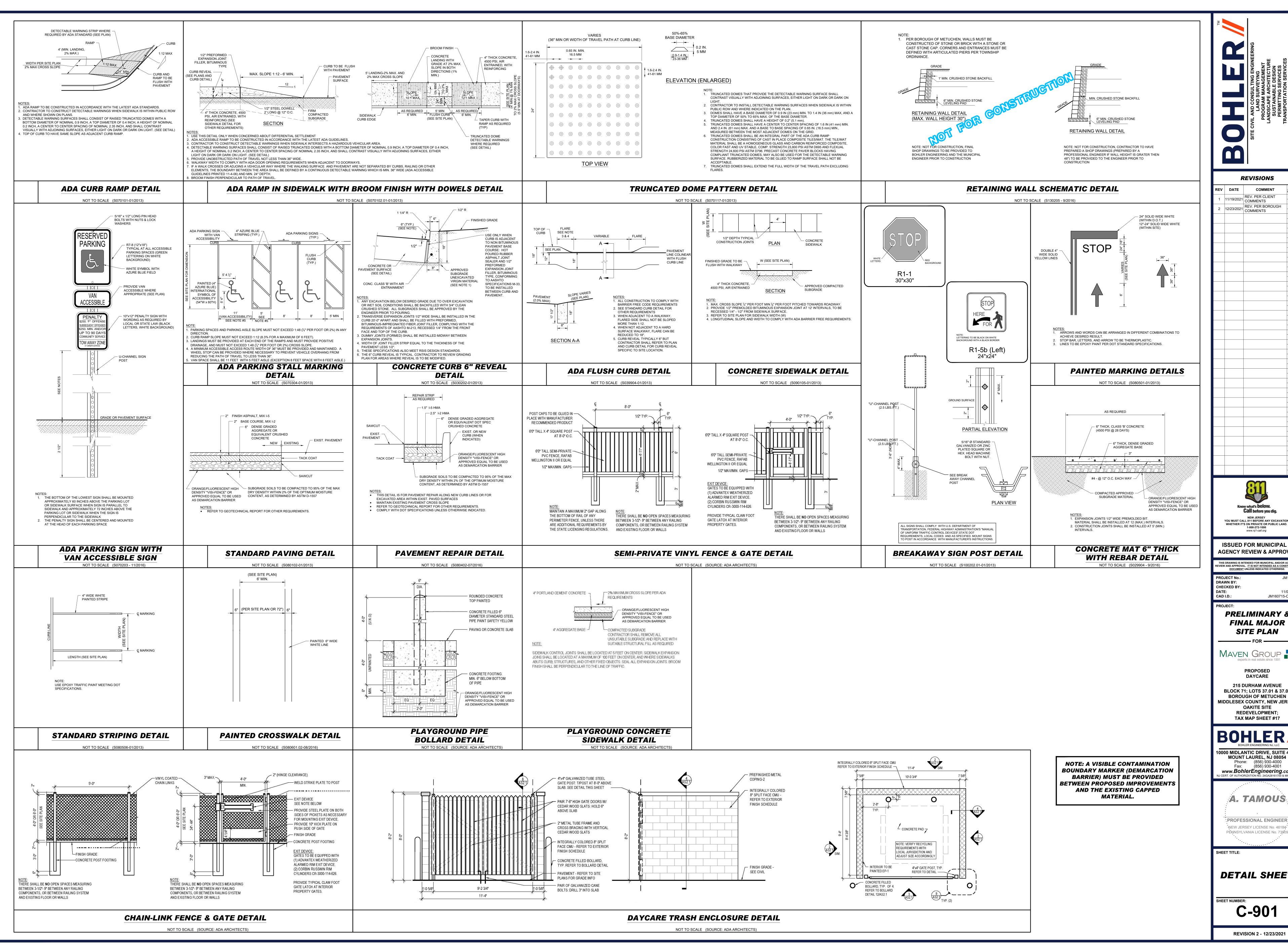






ECOSENSE RISE LED

FLAG POLE LIGHT (F-1) NOT TO SCALE



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11/08/2021 JM160715-CDS-2A PRELIMINARY &

MAVEN GROUP

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215 DURHAM AVENUE BLOCK 71; LOTS 37.01 & 37.02 **BOROUGH OF METUCHEN MIDDLESEX COUNTY, NEW JERSEY** OAKITE SITE REDEVELOPMENT;

10000 MIDLANTIC DRIVE, SUITE 410W

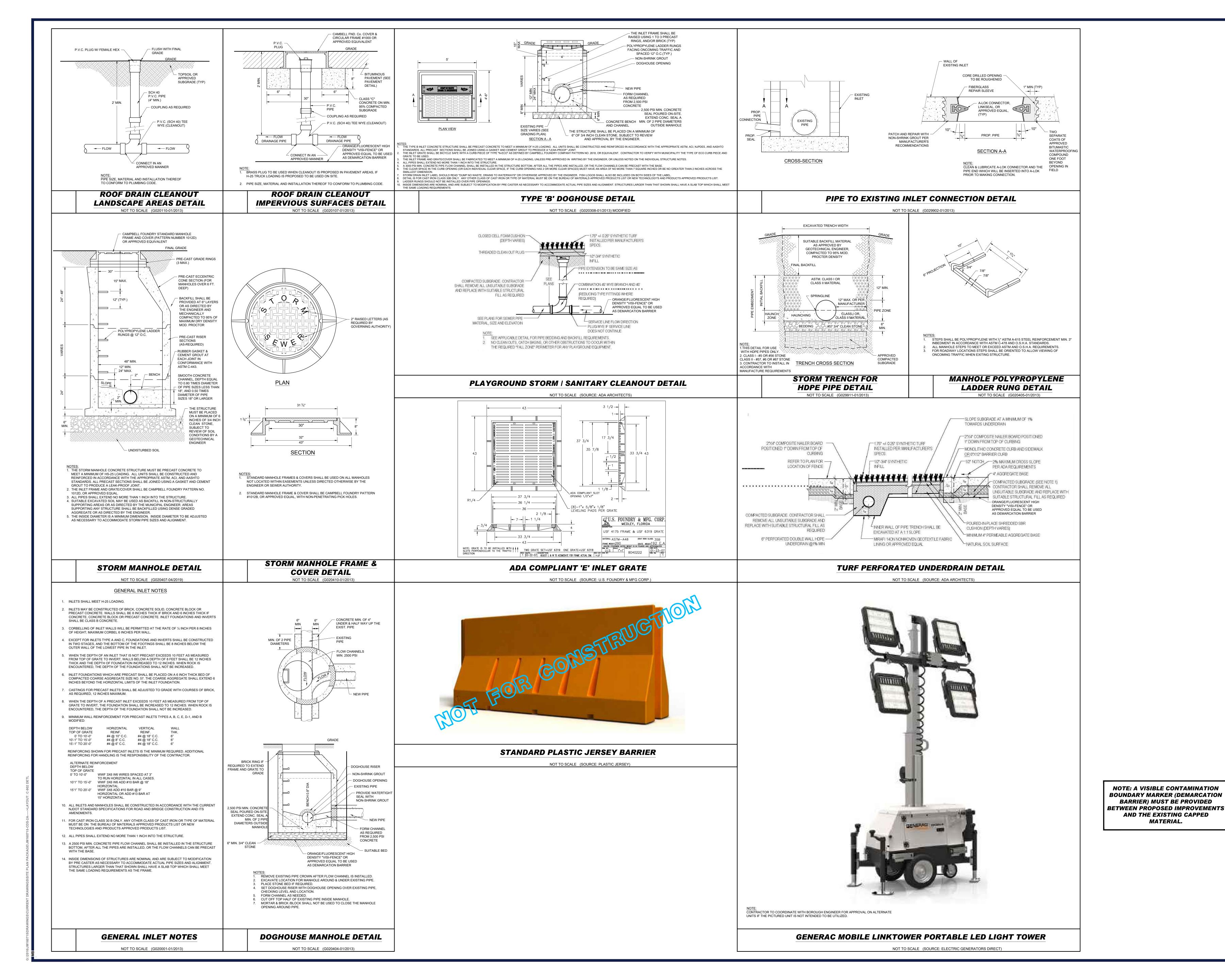
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**DETAIL SHEET** 

C-901



SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
TRANSPORTATION SERVICES
TRANSPORTATION SERVICES

THE CIVIL AND CONSULTING ENGINEERING
ENGINEERING
PROGRETARY AND SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES

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DATE:
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PRELIMINARY &
FINAL MAJOR
SITE PLAN

MAVEN GROUP experts in real estate since 1991

PROPOSED

DAYCARE

215 DURHAM AVENUE
BLOCK 71; LOTS 37.01 & 37.02
BOROUGH OF METUCHEN
MIDDLESEX COUNTY, NEW JERSEY

OAKITE SITE REDEVELOPMENT;

BOHLER //
BOHLER ENGINEERING NJ, LLC

BUFLER ENGINEERING NJ, LLC

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PROFESSIONAL ENGINEER

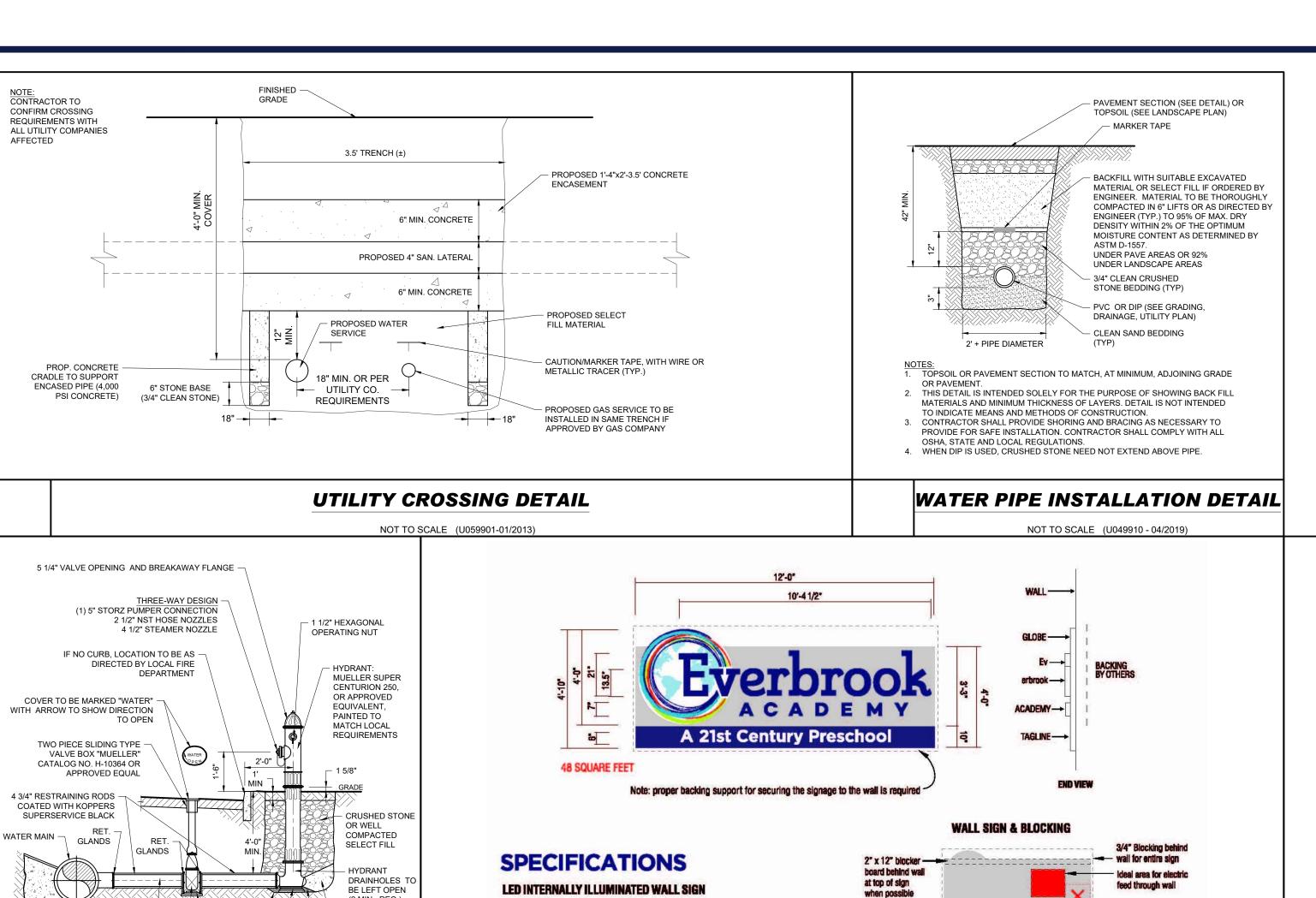
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SHEET TITLE:

**DETAIL SHEET** 

C-902



Panel will be non illuminated silver matt finish

with the exact location TBD by location

1-20 AMP Circuit required - 4 AMPS

Purple PMS 5265 CP

Blue PMS 7703 CP

Red PMS 7626 CP

Green PMS 382 CP

Illuminated Globe will have routed face with vinyl graphics

Ev will be 1" clear acrylic letters with translucent purple vinyl applied to 1st surface

erbrook and academy will be 1" routed push acrylic letters with translucent purple

Note: a j-box and cut off switch for electric hookup will be required

Note: Proper 3/4" blocking is required behind the wall to support the signage

vinyl applied to 1st surface. Illuminated tagline will be purple with white routed copy

(2 MIN., REQ.)

- APPROVED

**BLOCK** 

- 1/3 CY CLEAN

OR COURSE

DRAIN COCK)

ONCRETE

CRUSHED STONE

GRAVEL (UNDER

GLANDS

 $^{ackslash}$  FLAT ROCK -

CONCRETE

- 6" CAST IRON GATE VALVE

WITH MECHANICAL JOINT

ORANGE/FLUORESCENT HIGH

APPROVED EQUAL TO BE USED

DENSITY "VISI-FENCE" OR

AS DEMARCATION BARRIER

CONTRACTOR TO CONFIRM TYPE OF HYDRANT TO USE WITH LOCAL WATER PURVEYOR AND LOCAL

CONTRACTOR TO READ AND REVIEW THE LOCAL FIRE CODE FOR VALVE/HYDRANT SPECIFICATIONS

PRIOR TO THE PURCHASE OR INSTALLATION OF ANY EQUIPMENT. ANY QUESTION OF MATERIAL OR

UNLESS SUPERSEDED BY LOCAL REQUIREMENTS. SIZE. TYPE, AND INSTALLATION OF HYDRANTS SHALL CONFORM TO THE FOLLOWING SPECIFICATION, INCORPORATED HEREIN BY REFERENCE, AS

AWWA STANDARD FOR DRY-BARREL FIRE HYDRANTS, ANSI/AWWA C502. HYDRANTS SHALL HAVE AT LEAST THREE (3) OUTLETS: ONE OUTLET SHALL BE A PUMPER OUTLET, THE OTHER OUTLETS

SHALL BE AT LEAST TWO AND ONE-HALF (2½) INCH NOMINAL SIZE. THE PUMPER OUTLET SHALL

GRADE. WHEN A CONCRETE SLAB IS PROVIDED AROUND THE HYDRANT RISER, THE FLANGE

ADJACENT GRADE STREET MAIN CONNECTIONS SHALL NOT BE LESS THAN SIX INCHES IN DIAMETER. HOSE THREADS ON OUTLETS SHALL BE COMPATIBLE WITH EXISTING MUNICIPAL

WHERE THE HYDRANT CONNECTS TO THE RISER SHALL BE AT LEAST TWO INCHES ABOVE THE

FACE THE STREET. ALL OUTLET NOZZLES SHALL BE AT LEAST 12 INCHES ABOVE THE ADJOINING

EQUIPMENT AND SHALL EITHER CONFORM TO NFPA 1963 OR SHALL MATCH EXISTING MUNICIPAL REQUIREMENTS. A VALVE SHALL BE PROVIDED ON CONNECTIONS BETWEEN HYDRANTS AND

DISTANCE FROM CURB IS TYPICAL, HOWEVER CONTRACTOR MUST REFER TO UTILITY PLAN FOR

FIRE HYDRANT DETAIL

NOT TO SCALE (U049901-01/2017)

STREET MAINS. ALL PIPES, FITTINGS, AND APPURTENANCES SUPPLYING FIRE HYDRANTS SHALL BE

SIZE, TYPE, AND INSTALLATION OF HYDRANTS SHOULD BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY OR THE WATER PURVEYOR, OR SHALL CONFORM TO THE

FIRE DEPT. PRIOR TO ORDERING HYDRANT AND APPURTENANCES.

REQUIREMENTS TO BE RESOLVED WITH LOCAL FIRE MARSHAL.

ALL FIRE HYDRANTS SHALL CONFORM TO NFPA STANDARD 291.

ENDS AS REQUIRED BY

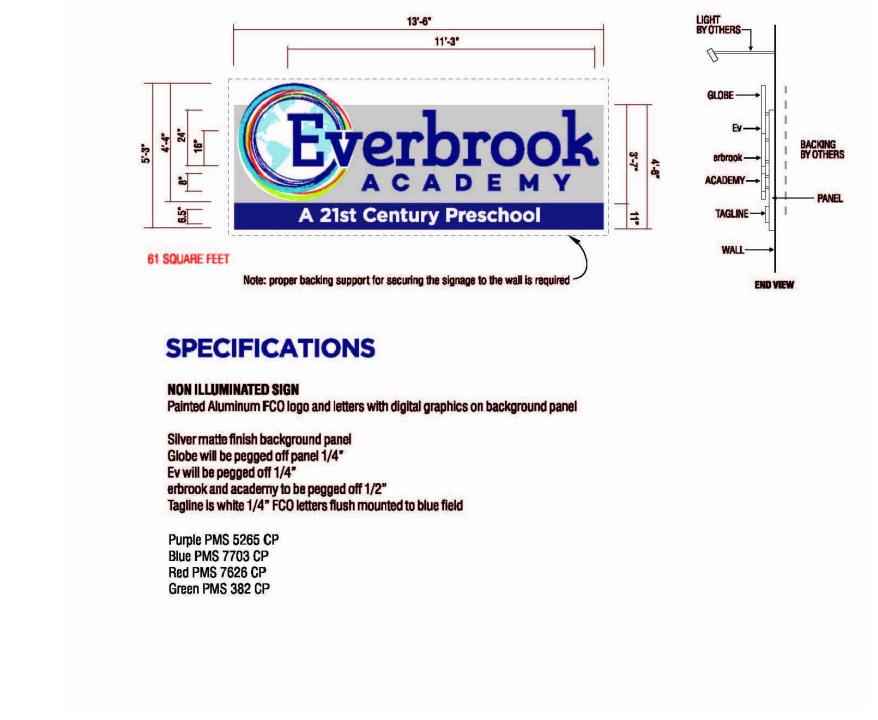
└─ PROPOSED

6" CEMENT LINED DIP -

AWWA OR ASTM APPROVED. (RSIS)

- CONCRETE

THRUST BLOCK



MAIN ENTRANCE EVERBROOK ACADEMY FACADE SIGNAGE DETAIL (SOUTH ELEVATION) EVERBROOK ACADEMY FACADE SIGNAGE DETAIL (EAST AND NORTH ELEVATION)

NOT TO SCALE (SOURCE: KOZ)

LIGHT POLE FOUNDATION DETAIL

LIGHT POLE FOUNDATION NOTES

1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS,

ENSURE NO CONFLICTS ARISE BETWEEN LIGHT POLE FOUNDATIONS,

STRUCTURES, AND UTILITIES. IF ANY DISCREPANCIES BETWEEN FIELD

CRITERIA PRIOR TO CONSTRUCTION IN ACCORDANCE TO THE DESIGN

CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

WITH ACI-318. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL

STANDARD PRACTICE: DETAILS AND DETAILING OF CONCRETE

STRENGTH ON LABORATORY TEST RESULTS

IMMEDIATELY IN WRITING.

DOCUMENTS.

TOLERANCE OF 1".

LAP SPLICE

COVER (TYP)

REINFORCEMENT

CONCRETE FOUNDATION -

MINIMUM DIAMETER ("C")

VERTICAL -

BARS ("F")

REINFORCEMENT TIES ("E")

COORDINATE WITH ALL CONTRACT DRAWINGS. PROJECT SHOP DRAWINGS

CONDITIONS AND DESIGN PLANS ARISE, THE ENGINEER MUST BE NOTIFIED

2. THE CONTRACTOR IS TO HAVE A GEOTECHNICAL ENGINEER, LICENSED IN

THE PROJECT'S STATE, ON SITE TO INSPECT FILL, MONITOR FILL COMPACTION

AND TO VERIFY SUBGRADE ALLOWABLE BEARING CAPACITY AND SOIL DESIGN

ASSUMPTIONS STATED. UNSUITABLE MATERIALS FOUND MUST BE REMOVED

3. IF CONDITIONS IN THE FIELD ARE DIFFERENT THAN THOSE INDICATED. THE

4. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT APPROPRIATE SELECT

5. STRUCTURAL CONCRETE AND CONCRETING PRACTICES SHALL CONFORM

CONCRETE." DETAILS ARE TO BE IN ACCORDANCE WITH ACI-315, "MANUAL OF

REINFORCEMENT." FORM WORK SHALL CONFORM ACI-347 "GUIDE TO FORM

WORK FOR CONCRETE", UNLESS OTHERWISE NOTED ON THE CONTRACT

6. CONCRETE MUST BE NORMAL WEIGHT STONE AGGREGATE WITH THE

OR LABORATORY TESTS FOR THE PRELIMINARY DESIGN MIX IS TO BE

7. CONCRETE IS TO HAVE A SLUMP NO GREATER THAN 4" TO WITHIN A

STATED MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. HISTORICAL DATA

SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. THE

WATER-CEMENT RATIO FOR THE PROPOSED MIX DESIGN MUST ACHIEVE AN

AVERAGE 28-DAY STRENGTH OF 1,200 PSI GREATER THAN THE REQUIRED

**SECTION VIEW** 

CONTRACTOR TO

COORDINATE LIGHT POLE

MANUFACTURER UNLESS

SIZE AND TYPE WITH

OTHERWISE NOTED

ELECTRIC CONDUIT

CURB (SEE SITE -

PLANS FOR

LOCATION)

STUB UP MIN 12"

HIGH-STRENGTH NON-SHRINK GROUT

1" CHAMFER

VERTICAL -

BARS ("F")

3" CLEAR COVER

REINFORCEMENT

LIGHTNING GROUND ROD -

TO COMPLY WITH N.E.C.

HANDHOLF

WITH COVER

OWNER AND LIGHTING

BACKFILL IS USED, AND THOROUGHLY COMPACTED TO 98% MAX. DENSITY

OR BE REMEDIED AS PER THE DIRECTION OF THE ON SITE GEOTECHNICAL

AND FIELD CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR MUST

NOT TO SCALE (I020101-01/2019) (MODIFIED

8. EXPOSED CONCRETE IS TO BE AIR ENTRAINED, 6% (WITHIN 1%

9. CONCRETE TO BE CONSOLIDATED IN PLACE USING AN INTERNAL

10. REINFORCING STEEL BARS SHALL BILLET STEEL ASTM A615, GRADE 60.

CONCRETE. IF REQUIRED, ADDITIONAL BARS OR STIRRUPS TO BE PROVIDED

BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS. BAR SUPPORTS

11. ALL SPLICES OF REINFORCING BARS NOT INDICATED ARE TO BE LTS AS

DISCONTINUOUS ENDS OF CONTINUOUS BARS ARE TO BE STANDARD HOOKS.

12. IF CAVING OF DRILLED HOLES ARE ENCOUNTERED, CONTRACTOR SHALL

13. CONCRETE MUST ATTAIN 80% OF THE DESIGN STRENGTH OR CURE FOR A

15. WHEN 2'-6" CLEARANCE CAN NOT BE PROVIDED, CONCRETE FOUNDATION

17. CONTRACTOR IS TO RECORD ON A CLEAN COPY OF THE LIGHTING PLANS.

THE LOCATION OF CONDUIT SUPPLYING POWER TO LIGHTS. A COMPLETED

COPY OF THIS RECORD PLAN IS TO BE PROVIDED TO THE OWNER PRIOR TO

18. UPON ACCEPTANCE OF THE COMPLETED WORK BY THE OWNER, THE OWNER IS RESPONSIBLE FOR APPROPRIATE MAINTENANCE OF THE LIGHTING

LIGHT POLE FOUNDATION SCHEDULE

SINGLE

6'-0"

#3 TIES

(6) #5 BARS

EQUALLY SPACED

CURB -

PLAN VIEW AT PARKING STALLS

LIGHT POLE FOUNDATION

DESIGN CRITERIA

MINIMUM REQUIRED ALLOWABLE BEARING PRESSURE = 1,000 PSF -

SOIL FRICTION ANGLE = 30 DEG - ASSUMED (TO BE VERIFIED IN FIELD)

SOIL DRY UNIT WEIGHT = 120 PCF - ASSUMED (TO BE VERIFIED IN FIELD)

**FOUNDATION** 

\ STALLS

MINIMUM OF 7-DAYS PRIOR TO THE INSTALLATION OF THE LIGHT POLES OR

ALL LIGHT POLES ARE TO BE SUITABLY BRACED AGAINST WIND LOADS

MUST BE EXTENDED TO 30" ABOVE SURFACE, OR PROVIDE BOLLARD

PROVIDE BENTONITE SLURRY IN PERMANENT CASINGS FOR DRILLED

ALL REINFORCEMENT TO BE SECURELY HELD IN PLACE WHILE PLACING

IN CONTACT WITH EXPOSED SURFACES TO BE PLASTIC TIPPED. ALL

PER THE REINFORCING SPLICE SCHEDULE OR 40 BAR DIAMETERS.

TOLERANCE), CONFORMING TO ASTM C260.

ACCESSORIES MUST BE GALVANIZED.

CONCRETE PIER FOUNDATIONS.

PROTECTION FOR LIGHT POLE.

FINAL ACCEPTANCE OF THE WORK

MAXIMUM HEIGHT ABOVE GRADE "A" \*\*

ASSUMED AVERAGE POLE DIAMETER "B"

MINIMUM FOUNDATION DIAMETER "C

MINIMUM FOUNDATION DEPTH "D"

POLE LENGTH
CONTRACTOR TO ADJUST LENGTH OF POLE

DIFFERENT LOCATIONS, AS NECESSARY TO SET

LUMINARIES AT MOUNTING HEIGHT INDICATED IN

LIGHTING SCHEDULE. MOUNTING HEIGHT IS TO

ELEVATION ADJACENT TO POLE FOUNDATION TO

DEPENDANT ON FOUNDATION HEIGHT IN

BE MEASURED FROM GROUND SURFACE

ANCHOR BOLTS AND

MANUFACTURER

REINFORCEMENT

TIES SPACING ("E")

FOUNDATION DIAMETER ("C")

SEE SCHEDULE AND NOTES FOR ADDITIONAL INFORMATION

BASE PLATE BY LIGHTING

2" TYPICAL (30" FOR AREAS NOT

VERTICAL HOOKED REINFORCEMENT "F"

= ADD 3 TIES, 4" C-C, AT TOP OF THE FOUNDATION

= THIS MAY NOT BE ACTUAL MOUNTING HEIGHT, SEE LIGHTING

FOR PRECAST FOUNDATIONS, USE

SUITABLE BACKFILL MATERIALS

TO BE COMPACTED TO 98% ASTM

D 698 OPTIMUM DRY PROCTOR

DENSITY IN 6" LOOSE LIFTS

- AUGERED CAST-IN-PLACE OR

PRECAST CONCRETE PIER

AIR-ENTRAINED CONCRETE

WIND PRESSURE = 30 PSF

FOUNDATION, 3000 PSI

DRANGE/FLUORESCENT HIGH

DENSITY "VISI-FENCE" OR APPROVED EQUAL TO BE USED

AS DEMARCATION BARRIER

REINFORCING TIES "E" \*

# OF FIXTURES

DURING THE ABOVE MENTIONED TIMEFRAME.

14. ALL ELECTRICAL COMPONENTS TO COMPLY WITH N.E.C.

16. VERIFY WITH LOCATIONS SHOWN ON LIGHTING PLAN

VIBRATOR.



24" Square from the corner

24" up and 24" to the right

Applies to all size signs Dimensions very by size of sign

NOT TO SCALE (SOURCE: KOZ)

**BOUNDARY MARKER (DEMARCATION** BARRIER) MUST BE PROVIDED **BETWEEN PROPOSED IMPROVEMENTS** AND THE EXISTING CAPPED MATERIAL.

**NOTE: A VISIBLE CONTAMINATION** 

**REVISIONS** 

COMMENT REV DATE REV. PER CLIENT 1 | 11/19/2021 | COMMENTS REV. PER BOROUGH 2 |12/23/2021 | COMMENTS

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TAX MAP SHEET #17

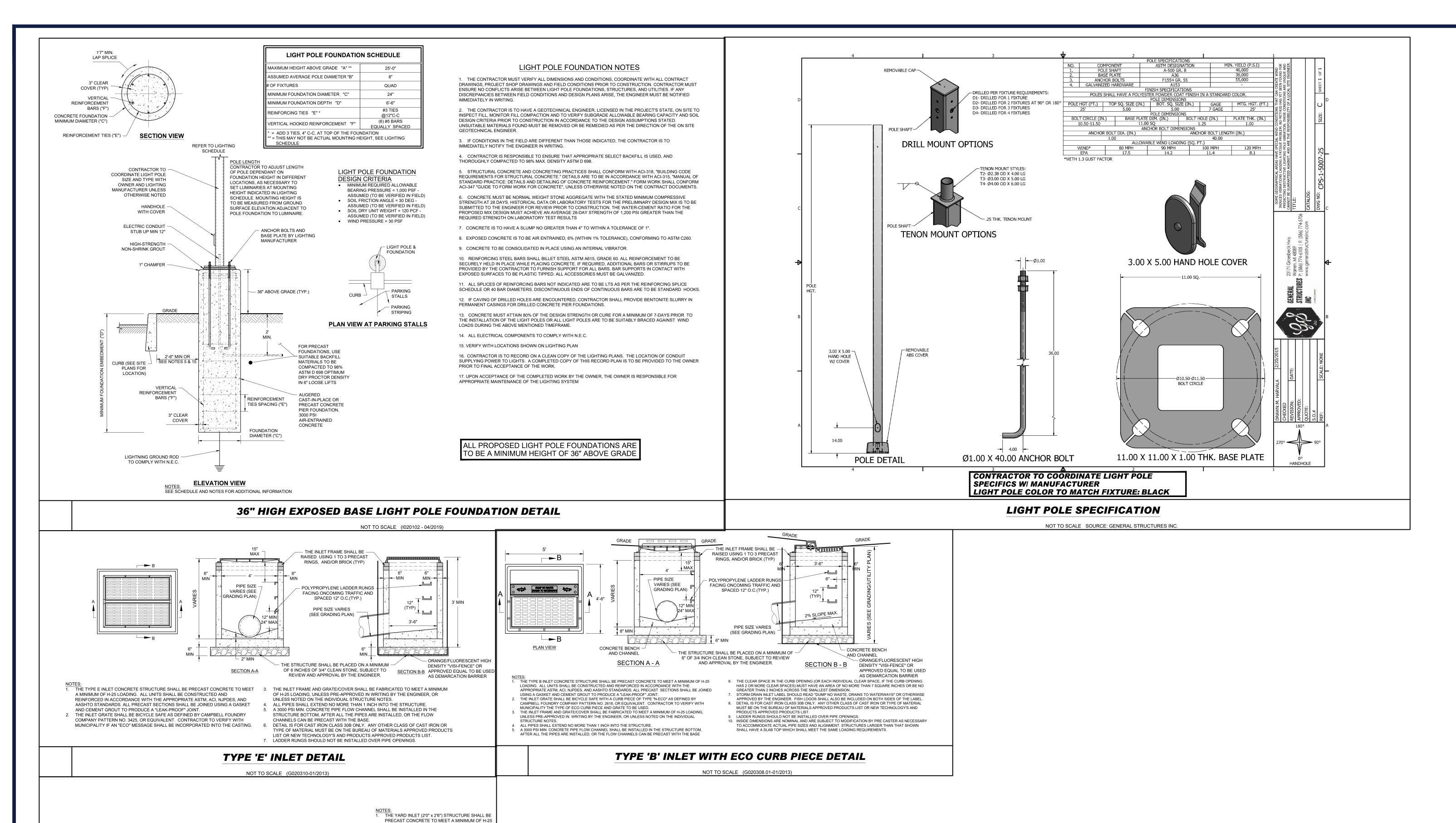
10000 MIDLANTIC DRIVE, SUITE 410W MOUNT LAUREL, NJ 08054 Phone: (856) 930-4000 Fax: (856) 930-4001 www.BohlerEngineering.com NJ CERT. OF AUTHORIZATION NO. 24GA28161700 & MH000

A. TAMOUS

**PROFESSIONAL ENGINEER** NEW JERSEY LICENSE No. 46184 PENNSYLVANIA LICENSE No. 73909

**DETAIL SHEET** 

C-903



LOADING. ALL UNITS SHALL BE CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH THE APPROPRIATE ASTM, ACI, AND AASHTO

STANDARDS. ALL PRECAST SECTIONS SHALL BE JOINED USING A GASKET AND CEMENT GROUT T

PRODUCE A "LEAK-PROOF" JOINT. THE STRUCTURE SHALL NOT BE PLACED IN A PAVED AREA, OR IN OTHER AREAS WHERE HIGH LOADS

2. THE INLET FRAME AND GRATE/COVER SHALL BE

THE INLET FRAME AND GRATE/COVER SHALL BE

ALL PIPES SHALL EXTEND NO MORE THAN 1 INCH

A 2500 PSI MIN. CONCRETE PIPE FLOW CHANNEL SHALL BE INSTALLED IN THE STRUCTURE

BOTTOM, AFTER ALL THE PIPES ARE INSTALLED,

OR THE FLOW CHANNELS CAN BE PRECAST WITH

LADDER RUNGS SHOULD NOT BE INSTALLED OVER

CAMPBELL FOUNDRY PATTERN NO. 3084 OR

FABRICATED FOR "HEAVY DUTY".

MAY BE INCURRED.

APPROVED EQUAL.

INTO THE STRUCTURE.

THE BASE.

SECTION B - B

VARIES (SEE GRADING

DENSITY "VISI-FENCE" OR

AS DEMARCATION BARRIER

APPROVED EQUAL TO BE USED SECTION A - A

- THE INLET FRAME SHALL -

BE RAISED USING FROM 1

TO 3 PRECAST RINGS,

AND/OR BRICK (TYP)

PIPE SIZE VARIES

(SEE GRADING PLAN)

THE STRUCTURE SHALL BE PLACED ON A ----

YARD INLET 2'-0" x 2'-6" DETAIL

NOT TO SCALE (G020311-01/2013)

MINIMUM OF 6 INCHES OF 3/4 INCH CLEAN STONE,

SUBJECT TO REVIEW OF SOIL CONDITIONS BY A

**NOTE: A VISIBLE CONTAMINATION BOUNDARY MARKER (DEMARCATION** BARRIER) MUST BE PROVIDED BETWEEN PROPOSED IMPROVEMENTS AND THE EXISTING CAPPED MATERIAL.

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**DETAIL SHEET** 

C-904